



Sweet Sorghum an alternative energy Crop

Grant Agreement n° 227422

WP1

Deliverable 1.3:

*Several hundreds elite B and R-accessions
with cold tolerance available*

Composition of the consortium

CIRAD
ICRISAT
EMBRAPA
KWS
IFEU
UniBO
UCSC
ARC-GCI
UANL
WIP



The different lines listed here under are currently used in the WP1 breeding programme. Most of them are still progenies in phase of selection and thus could not be considered as available material. This material in the Maintainer-Pool will be available in BC2-Stage (cms-conversion) in the next year.

B-lines with a cold tolerance

IDT	GENOTYPE	DER	POOL	PLASMA	GENER	DtF	KLZ
ZC1-41009/001	E603-**11	E603	F	N	S2	83	
ZC1-41009/002	E603-**12	E603	F	N	S2	83	
ZC1-41009/003	E603-**13	E603	F	N	S2	78	
ZC1-41009/004	E603-**14	E603	F	N	S2	79	
ZC1-41009/005	E603-**16	E603	F	N	S2	78	
ZC1-41010/001	E603-**17	E603	F	N	S2	82	
ZC1-41010/002	E603-**22	E603	F	N	S2	82	
ZC1-41010/003	E603-**18	E603	F	N	S2	78	
ZC1-41010/004	E603-**19	E603	F	N	S2	82	
ZC1-41010/005	E603-**21	E603	F	N	S2	96	
ZC1-41010/006	E603-**20	E603	F	N	S2	83	
ZC1-41011/001	E603-**23	E603	F	N	S2	78	
ZC1-41011/002	E603-**26	E603	F	N	S2	83	
ZC1-41011/003	E603-**28	E603	F	N	S2	78	
ZC1-41011/004	E603-**27	E603	F	N	S2	83	
ZC1-41011/005	E603-**25	E603	F	N	S2	83	
ZC1-41012/001	E603-**29	E603	F	N	S2	83	
ZC1-41012/002	E603-**33	E603	F	N	S2	85	
ZC1-41012/003	E603-**34	E603	F	N	S2	83	
ZC1-41012/004	E603-**30	E603	F	N	S2	83	
ZC1-41012/005	E603-**32	E603	F	N	S2	79	
ZC1-41012/006	E603-**31	E603	F	N	S2	79	
ZC1-41013/001	E603-**35	E603	F	N	S2	83	

IDT	GENOTYPE	DER	POOL	PLASMA	GENER
ZM1-30010/001	E603-**1111	E603	F	N	S3
ZM1-30303/001	E603A1-**1111BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30011/001	E603-**1211	E603	F	N	S3
ZM1-30294/016	E603A1-**1226BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30014/001	E603-**1611	E603	F	N	S3
ZM1-30302/007	E603A1-**1617BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30014/002	E603-**1612	E603	F	N	S3
ZM1-30288/011	E603A1-**1721BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30016/002	E603-**2212	E603	F	N	S3
ZM1-30306/007	E603A1-**2217BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30017/001	E603-**1811	E603	F	N	S3
ZM1-30304/009	E603A1-**1819BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30017/002	E603-**1812	E603	F	N	S3
ZM1-30304/013	E603A1-**1923BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30019/001	E603-**2111	E603	F	N	S3
ZM1-30302/005	E603A1-**2115BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30021/001	E603-**2311	E603	F	N	S3
ZM1-30299/007	E603A1-**2317BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30022/001	E603-**2611	E603	F	N	S3
ZM1-30300/010	E603A1-**2620BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30023/001	E603-**2811	E603	F	N	S3
ZM1-30298/001	E603A1-**2811BC1	1Z1064A1xE603	F	A1	BC1
ZM1-30024/002	E603-**2712	E603	F	N	S3

ZC1-41013/002	E603-***39	E603	F	N	S2	83	ZM1-30298/008	please code	1Z1064A1xE603	F	A1	F1
ZC1-41013/003	E603-***38	E603	F	N	S2	79	ZM1-30025/001	E603-***2511	E603	F	N	S3
ZC1-41014/001	E603-***40	E603	F	N	S2	79	ZM1-30299/006	E603A1-***2516BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41014/002	E603-***45	E603	F	N	S2	83	ZM1-30029/001	E603-***3011	E603	F	N	S3
ZC1-41014/003	E603-***42	E603	F	N	S2	84	ZM1-30295/011	E603A1-***3021BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41014/004	E603-***43	E603	F	N	S2	84	ZM1-30030/002	E603-***3212	E603	F	N	S3
ZC1-41014/005	E603-***44	E603	F	N	S2	84	ZM1-30295/005	E603A1-***3115BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41015/001	E603-***46	E603	F	N	S2	85	ZM1-30035/002	E603-***4012	E603	F	N	S3
ZC1-41015/002	E603-***50	E603	F	N	S2	85	ZM1-30304/002	E603A1-***4012BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41015/003	E603-***51	E603	F	N	S2	83	ZM1-30036/001	E603-***4511	E603	F	N	S3
ZC1-41015/004	E603-***49	E603	F	N	S2	76	ZM1-30298/004	E603A1-***4514BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41015/005	E603-***47	E603	F	N	S2	79	ZM1-30037/001	E603-***4211	E603	F	N	S3
ZC1-41016/001	E603-***52	E603	F	N	S2	77	ZM1-30294/001	E603A1-***4211BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41016/002	E603-***56	E603	F	N	S2	83	ZM1-30038/001	E603-***4311	E603	F	N	S3
ZC1-41016/003	E603-***57	E603	F	N	S2	78	ZM1-30300/015	E603A1-***4325BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41016/004	E603-***53	E603	F	N	S2	82	ZM1-30040/001	E603-***4611	E603	F	N	S3
ZC1-41016/005	E603-***54	E603	F	N	S2	79	ZM1-30302/001	E603A1-***4611BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41016/006	E603-***55	E603	F	N	S2	78	ZM1-30041/001	E603-***5011	E603	F	N	S3
ZC1-41017/001	E603-***58	E603	F	N	S2	82	ZM1-30292/005	E603A1-***5015BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41017/002	E603-***63	E603	F	N	S2	82	ZM1-30042/001	E603-***5111	E603	F	N	S3
ZC1-41017/003	E603-***59	E603	F	N	S2	96	ZM1-30292/001	E603A1-***5111BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41017/004	E603-***62	E603	F	N	S2	83	ZM1-30043/001	E603-***4911	E603	F	N	S3
ZC1-41017/005	E603-***60	E603	F	N	S2	83	ZM1-30290/013	E603A1-***4923BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41017/006	E603-***61	E603	F	N	S2	82	ZM1-30044/001	E603-***4711	E603	F	N	S3
ZC1-41018/001	E603-***64	E603	F	N	S2	98	ZM1-30294/011	E603A1-***4721BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41018/002	E603-***69	E603	F	N	S2	78	ZM1-30046/002	E603-***5612	E603	F	N	S3
ZC1-41018/003	E603-***66	E603	F	N	S2	83	ZM1-30307/007	E603A1-***5617BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41018/004	E603-***67	E603	F	N	S2	83	ZM1-30047/001	E603-***5711	E603	F	N	S3
ZC1-41018/005	E603-***68	E603	F	N	S2	82	ZM1-30293/006	E603A1-***5716BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41018/006	E603-***65	E603	F	N	S2	82	ZM1-30048/001	E603-***5311	E603	F	N	S3
ZC1-41019/001	E606-***11	E606	F	N	S2	80	ZM1-30051/001	E603-***5811	E603	F	N	S3
ZC1-41019/002	E606-***15	E606	F	N	S2	82	ZM1-30294/014	E603A1-***5824BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41019/003	E606-***16	E606	F	N	S2	83	ZM1-30053/001	E603-***5911	E603	F	N	S3

ZC1-41019/004	E606-**14	E606	F	N	S2	83	ZM1-30285/015	E603A1-**5925BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41019/005	E606-**12	E606	F	N	S2	83	ZM1-30057/001	E603-**6411	E603	F	N	S3
ZC1-41019/006	E606-**13	E606	F	N	S2	82	ZM1-30300/005	E603A1-**6415BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41020/001	E606-**17	E606	F	N	S2	83	ZM1-30058/001	E603-**6911	E603	F	N	S3
ZC1-41020/002	E606-**21	E606	F	N	S2	79	ZM1-30305/003	E603A1-**6913BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41020/003	E606-**22	E606	F	N	S2	82	ZM1-30059/001	E603-**6611	E603	F	N	S3
ZC1-41020/004	E606-**18	E606	F	N	S2	79	ZM1-30305/004	E603A1-**6614BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41020/005	E606-**19	E606	F	N	S2	79	ZM1-30060/001	E603-**6711	E603	F	N	S3
ZC1-41021/001	E606-**23	E606	F	N	S2	81	ZM1-30300/014	E603A1-**6724BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41021/002	E606-**28	E606	F	N	S2	78	ZM1-30061/002	E603-**6812	E603	F	N	S3
ZC1-41021/003	E606-**24	E606	F	N	S2	78	ZM1-30306/008	E603A1-**6518BC1	1Z1064A1xE603	F	A1	BC1
ZC1-41021/004	E606-**27	E606	F	N	S2	78	ZM1-30065/001	E606-**1511	E606	F	N	S3
ZC1-41022/001	E606-**29	E606	F	N	S2	78	ZM1-30305/009	E606A1-**1519BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41022/002	E606-**34	E606	F	N	S2	76	ZM1-30066/001	E606-**1611	E606	F	N	S3
ZC1-41022/003	E606-**31	E606	F	N	S2	76	ZM1-30303/009	E606A1-**1619BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41022/004	E606-**32	E606	F	N	S2	78	ZM1-30067/001	E606-**1411	E606	F	N	S3
ZC1-41022/005	E606-**33	E606	F	N	S2	76	ZM1-30307/003	E606A1-**1413BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41022/006	E606-**30	E606	F	N	S2	81	ZM1-30070/001	E606-**1711	E606	F	N	S3
ZC1-41023/001	E606-**35	E606	F	N	S2	78	ZM1-30308/003	E606A1-**1713BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41023/002	E606-**39	E606	F	N	S2	78	ZM1-30071/001	E606-**2111	E606	F	N	S3
ZC1-41023/003	E606-**40	E606	F	N	S2	78	ZM1-30288/006	E606A1-**2116BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41023/004	E606-**38	E606	F	N	S2	83	ZM1-30072/001	E606-**2211	E606	F	N	S3
ZC1-41023/005	E606-**36	E606	F	N	S2	82	ZM1-30285/003	E606A1-**2213BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41024/001	E606-**41	E606	F	N	S2	79	ZM1-30073/001	E606-**1811	E606	F	N	S3
ZC1-41024/002	E606-**45	E606	F	N	S2	81	ZM1-30287/007	E606A1-**1817BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41024/003	E606-**46	E606	F	N	S2	81	ZM1-30076/001	E606-**2811	E606	F	N	S3
ZC1-41024/004	E606-**42	E606	F	N	S2	78	ZM1-30285/002	E606A1-**2812BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41024/005	E606-**43	E606	F	N	S2	78	ZM1-30077/001	E606-**2411	E606	F	N	S3
ZC1-41024/006	E606-**44	E606	F	N	S2	79	ZM1-30285/014	E606A1-**2424BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41025/001	E606-**47	E606	F	N	S2	79	ZM1-30080/002	E606-**3412	E606	F	N	S3
ZC1-41025/002	E606-**52	E606	F	N	S2	83	ZM1-30288/014	E606A1-**3424BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41025/003	E606-**48	E606	F	N	S2	78	ZM1-30081/001	E606-**3111	E606	F	N	S3
ZC1-41025/004	E606-**51	E606	F	N	S2	83	ZM1-30290/010	E606A1-**3120BC1	1Z1064A1xE606	F	A1	BC1

ZC1-41025/005	E606-**49	E606	F	N	S2	83	ZM1-30081/002	E606-**3112	E606	F	N	S3
ZC1-41026/001	E606-**53	E606	F	N	S2	82	ZM1-30290/015	E606A1-**3225BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41026/002	E606-**58	E606	F	N	S2	82	ZM1-30085/002	E606-**3512	E606	F	N	S3
ZC1-41026/003	E606-**55	E606	F	N	S2	78	ZM1-30285/001	E606A1-**3511BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41026/004	E606-**56	E606	F	N	S2	81	ZM1-30086/001	E606-**3911	E606	F	N	S3
ZC1-41026/005	E606-**57	E606	F	N	S2	81	ZM1-30300/006	E606A1-**3916BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41026/006	E606-**54	E606	F	N	S2	79	ZM1-30089/001	E606-**3611	E606	F	N	S3
ZC1-41027/001	E606-**59	E606	F	N	S2	78	ZM1-30296/001	E606A1-**3611BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41027/002	E606-**63	E606	F	N	S2	79	ZM1-30089/002	E606-**3612	E606	F	N	S3
ZC1-41027/003	E606-**64	E606	F	N	S2	78	ZM1-30300/011	E606A1-**3621BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41027/004	E606-**62	E606	F	N	S2	78	ZM1-30090/001	E606-**4111	E606	F	N	S3
ZC1-41027/005	E606-**60	E606	F	N	S2	79	ZM1-30289/003	E606A1-**4113BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41027/006	E606-**61	E606	F	N	S2	81	ZM1-30090/002	E606-**4112	E606	F	N	S3
ZC1-41028/001	E606-**65	E606	F	N	S2	80	ZM1-30298/009	E606A1-**4519BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41028/002	E606-**68	E606	F	N	S2	78	ZM1-30092/001	E606-**4611	E606	F	N	S3
ZC1-41028/003	E606-**69	E606	F	N	S2	81	ZM1-30289/006	E606A1-**4616BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41029/001	E611-**11	E611	F	N	S2	78	ZM1-30096/001	E606-**4711	E606	F	N	S3
ZC1-41029/002	E611-**16	E611	F	N	S2	76	ZM1-30285/006	E606A1-**4716BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41029/003	E611-**12	E611	F	N	S2	76	ZM1-30096/002	E606-**4712	E606	F	N	S3
ZC1-41029/004	E611-**13	E611	F	N	S2	78	ZM1-30286/002	E606A1-**4712BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41029/005	E611-**15	E611	F	N	S2	78	ZM1-30098/002	E606-**4812	E606	F	N	S3
ZC1-41029/006	E611-**14	E611	F	N	S2	79	ZM1-30291/011	E606A1-**4821BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41030/001	E611-**17	E611	F	N	S2	79	ZM1-30099/001	E606-**5111	E606	F	N	S3
ZC1-41030/002	E611-**20	E611	F	N	S2	79	ZM1-30285/012	E606A1-**5122BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41030/003	E611-**22	E611	F	N	S2	79	ZM1-30100/002	E606-**4912	E606	F	N	S3
ZC1-41030/004	E611-**21	E611	F	N	S2	76	ZM1-30288/004	E606A1-**4914BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41030/005	E611-**19	E611	F	N	S2	78	ZM1-30101/001	E606-**5311	E606	F	N	S3
ZC1-41030/006	E611-**18	E611	F	N	S2	78	ZM1-30287/002	E606A1-**5312BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41031/001	E611-**23	E611	F	N	S2	78	ZM1-30102/001	E606-**5811	E606	F	N	S3
ZC1-41031/002	E611-**27	E611	F	N	S2	78	ZM1-30288/013	E606A1-**5823BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41031/003	E611-**28	E611	F	N	S2	79	ZM1-30103/001	E606-**5511	E606	F	N	S3
ZC1-41031/004	E611-**24	E611	F	N	S2	78	ZM1-30293/002	E606A1-**5512BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41031/005	E611-**26	E611	F	N	S2	78	ZM1-30103/002	E606-**5512	E606	F	N	S3

ZC1-41032/001	E611-**29	E611	F	N	S2	78	ZM1-30287/006	E606A1-**5616BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41032/002	E611-**34	E611	F	N	S2	79	ZM1-30108/001	E606-**6311	E606	F	N	S3
ZC1-41032/003	E611-**33	E611	F	N	S2	78	ZM1-30288/005	E606A1-**6315BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41032/004	E611-**30	E611	F	N	S2	78	ZM1-30109/001	E606-**6411	E606	F	N	S3
ZC1-41032/005	E611-**31	E611	F	N	S2	78	ZM1-30289/012	E606A1-**6422BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41032/006	E611-**32	E611	F	N	S2	78	ZM1-30110/002	E606-**6212	E606	F	N	S3
ZC1-41033/001	E611-**35	E611	F	N	S2	79	ZM1-30293/009	E606A1-**6219BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41033/002	E611-**40	E611	F	N	S2	79	ZM1-30111/001	E606-**6011	E606	F	N	S3
ZC1-41033/003	E611-**36	E611	F	N	S2	78	ZM1-30294/002	E606A1-**6012BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41033/004	E611-**37	E611	F	N	S2	79	ZM1-30113/001	E606-**6511	E606	F	N	S3
ZC1-41033/005	E611-**39	E611	F	N	S2	76	ZM1-30304/011	E606A1-**6521BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41033/006	E611-**38	E611	F	N	S2	89	ZM1-30115/001	E606-**6911	E606	F	N	S3
ZC1-41034/001	E611-**41	E611	F	N	S2	77	ZM1-30287/012	E606A1-**6922BC1	1Z1064A1xE606	F	A1	BC1
ZC1-41035/004	E611-**48	E611	F	N	S2	77	ZM1-30118/001	E611-**1111	E611	F	N	S3
ZC1-41035/005	E611-**50	E611	F	N	S2	77	ZM1-30291/017	E611A1-**1127BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41035/006	E611-**49	E611	F	N	S2	78	ZM1-30121/001	E611-**1311	E611	F	N	S3
ZC1-41036/001	E611-**53	E611	F	N	S2	78	ZM1-30291/006	E611A1-**1316BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41036/002	E611-**57	E611	F	N	S2	76	ZM1-30122/001	E611-**1511	E611	F	N	S3
ZC1-41036/003	E611-**56	E611	F	N	S2	83	ZM1-30291/002	E611A1-**1512BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41036/004	E611-**54	E611	F	N	S2	77	ZM1-30124/001	E611-**1711	E611	F	N	S3
ZC1-41037/001	E611-**58	E611	F	N	S2	81	ZM1-30291/003	E611A1-**1713BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41037/002	E611-**63	E611	F	N	S2	78	ZM1-30125/001	E611-**2011	E611	F	N	S3
ZC1-41037/003	E611-**60	E611	F	N	S2	79	ZM1-30292/007	E611A1-**2017BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41037/004	E611-**61	E611	F	N	S2	77	ZM1-30125/002	E611-**2012	E611	F	N	S3
ZC1-41037/005	E611-**62	E611	F	N	S2	76	ZM1-30295/013	E611A1-**2223BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41037/006	E611-**59	E611	F	N	S2	79	ZM1-30130/001	E611-**2311	E611	F	N	S3
ZC1-41038/001	E611-**64	E611	F	N	S2	76	ZM1-30294/008	E611A1-**2318BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41038/002	E611-**68	E611	F	N	S2	79	ZM1-30135/001	E611-**2911	E611	F	N	S3
ZC1-41038/003	E611-**69	E611	F	N	S2	78	ZM1-30290/012	E611A1-**2922BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41038/004	E611-**67	E611	F	N	S2	78	ZM1-30135/002	E611-**2912	E611	F	N	S3
ZC1-41038/005	E611-**65	E611	F	N	S2	81	ZM1-30295/010	E611A1-**3420BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41038/006	E611-**66	E611	F	N	S2	77	ZM1-30137/002	E611-**3312	E611	F	N	S3
ZC1-41039/001	E613-**11	E613	F	N	S2	83	ZM1-30145/001	E611-**3911	E611	F	N	S3

ZC1-41039/002	E613-***15	E613	F	N	S2	77	ZM1-30298/011	E611A1-***3921BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41039/003	E613-***16	E613	F	N	S2	77	ZM1-30146/002	E611-***3812	E611	F	N	S3
ZC1-41039/004	E613-***12	E613	F	N	S2	78	ZM1-30297/010	E611A1-***3820BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41039/005	E613-***13	E613	F	N	S2	78	ZM1-30147/002	E611-***4112	E611	F	N	S3
ZC1-41039/006	E613-***14	E613	F	N	S2	79	ZM1-30297/003	E611A1-***4113BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41040/001	E613-***17	E613	F	N	S2	77	ZM1-30154/001	E611-***5111	E611	F	N	S3
ZC1-41040/002	E613-***22	E613	F	N	S2	79	ZM1-30294/005	E611A1-***5115BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41040/003	E613-***18	E613	F	N	S2	78	ZM1-30159/001	E611-***5311	E611	F	N	S3
ZC1-41040/004	E613-***21	E613	F	N	S2	79	ZM1-30294/003	E611A1-***5313BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41040/005	E613-***19	E613	F	N	S2	83	ZM1-30159/002	E611-***5312	E611	F	N	S3
ZC1-41040/006	E613-***20	E613	F	N	S2	83	ZM1-30293/007	E611A1-***5317BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41041/001	E613-***23	E613	F	N	S2	81	ZM1-30161/001	E611-***5611	E611	F	N	S3
ZC1-41041/002	E613-***28	E613	F	N	S2	77	ZM1-30289/007	E611A1-***5617BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41041/003	E613-***25	E613	F	N	S2	79	ZM1-30161/002	E611-***5612	E611	F	N	S3
ZC1-41041/004	E613-***26	E613	F	N	S2	75	ZM1-30294/012	E611A1-***5622BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41041/005	E613-***27	E613	F	N	S2	75	ZM1-30163/001	E611-***5811	E611	F	N	S3
ZC1-41042/001	E613-***29	E613	F	N	S2	76	ZM1-30299/002	E611A1-***5812BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41042/002	E613-***32	E613	F	N	S2	83	ZM1-30169/002	E611-***6412	E611	F	N	S3
ZC1-41042/003	E613-***33	E613	F	N	S2	76	ZM1-30306/004	E611A1-***6414BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41042/004	E613-***31	E613	F	N	S2	81	ZM1-30170/001	E611-***6811	E611	F	N	S3
ZC1-41043/001	E613-***34	E613	F	N	S2	78	ZM1-30303/011	E611A1-***6821BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41043/002	E613-***39	E613	F	N	S2	79	ZM1-30171/002	E611-***6912	E611	F	N	S3
ZC1-41043/003	E613-***38	E613	F	N	S2	78	ZM1-30301/005	E611A1-***6915BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41043/004	E613-***35	E613	F	N	S2	83	ZM1-30173/001	E611-***6511	E611	F	N	S3
ZC1-41043/005	E613-***36	E613	F	N	S2	81	ZM1-30300/003	E611A1-***6513BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41044/001	E613-***40	E613	F	N	S2	79	ZM1-30174/002	E611-***6612	E611	F	N	S3
ZC1-41044/002	E613-***41	E613	F	N	S2	79	ZM1-30299/003	E611A1-***6613BC1	1Z1064A1xE611	F	A1	BC1
ZC1-41044/003	E613-***42	E613	F	N	S2	78	ZM1-30184/002	E613-***1112	E613	F	N	S3
ZC1-41044/004	E613-***43	E613	F	N	S2	79	ZM1-30300/012	E613A1-***1122BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41044/005	E613-***44	E613	F	N	S2	79	ZM1-30185/002	E613-***1512	E613	F	N	S3
ZC1-41044/006	E613-***45	E613	F	N	S2	79	ZM1-30292/011	E613A1-***1521BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41045/001	E613-***46	E613	F	N	S2	79	ZM1-30186/001	E613-***1611	E613	F	N	S3
ZC1-41045/002	E613-***47	E613	F	N	S2	81	ZM1-30301/010	E613A1-***1620BC1	1Z1064A1xE613	F	A1	BC1

ZC1-41045/003	E613-**48	E613	F	N	S2	81	ZM1-30187/002	E613-**1212	E613	F	N	S3
ZC1-41045/004	E613-**49	E613	F	N	S2	78	ZM1-30295/006	E613A1-**1316BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41045/005	E613-**50	E613	F	N	S2	76	ZM1-30191/001	E613-**2211	E613	F	N	S3
ZC1-41045/006	E613-**51	E613	F	N	S2	96	ZM1-30295/009	E613A1-**2219BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41046/001	E613-**52	E613	F	N	S2	78	ZM1-30194/001	E613-**1911	E613	F	N	S3
ZC1-41046/002	E613-**53	E613	F	N	S2	83	ZM1-30293/001	E613A1-**1911BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41046/003	E613-**54	E613	F	N	S2	77	ZM1-30194/002	E613-**1912	E613	F	N	S3
ZC1-41046/004	E613-**55	E613	F	N	S2	81	ZM1-30294/013	E613A1-**1923BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41047/001	E613-**58	E613	F	N	S2	78	ZM1-30199/001	E613-**2611	E613	F	N	S3
ZC1-41047/002	E613-**59	E613	F	N	S2	83	ZM1-30294/007	E613A1-**2617BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41047/003	E613-**60	E613	F	N	S2	81	ZM1-30200/002	E613-**2712	E613	F	N	S3
ZC1-41047/004	E613-**61	E613	F	N	S2	77	ZM1-30294/019	E613A1-**2729BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41047/005	E613-**62	E613	F	N	S2	78	ZM1-30202/002	E613-**3212	E613	F	N	S3
ZC1-41047/006	E613-**63	E613	F	N	S2	78	ZM1-30289/008	E613A1-**3218BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41048/001	E613-**64	E613	F	N	S2	83	ZM1-30203/002	E613-**3312	E613	F	N	S3
ZC1-41048/002	E613-**65	E613	F	N	S2	76	ZM1-30296/002	E613A1-**3112BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41048/003	E613-**66	E613	F	N	S2	83	ZM1-30208/001	E613-**3511	E613	F	N	S3
ZC1-41048/004	E613-**67	E613	F	N	S2	77	ZM1-30294/010	E613A1-**3520BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41048/005	E613-**68	E613	F	N	S2	79	ZM1-30218/001	E613-**4811	E613	F	N	S3
ZC1-41048/006	E613-**69	E613	F	N	S2	78	ZM1-30302/008	E613A1-**4818BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41049/001	E614-**11	E614	F	N	S2	76	ZM1-30219/001	E613-**4911	E613	F	N	S3
ZC1-41049/002	E614-**12	E614	F	N	S2	77	ZM1-30220/001	E613-**5011	E613	F	N	S3
ZC1-41049/003	E614-**13	E614	F	N	S2	76	ZM1-30300/001	E613A1-**5011BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41049/004	E614-**14	E614	F	N	S2	77	ZM1-30221/001	E613-**5111	E613	F	N	S3
ZC1-41049/005	E614-**15	E614	F	N	S2	77	ZM1-30290/016	E613A1-**5126BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41050/001	E614-**17	E614	F	N	S2	78	ZM1-30221/002	E613-**5112	E613	F	N	S3
ZC1-41050/002	E614-**18	E614	F	N	S2	78	ZM1-30291/007	E613A1-**5117BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41050/003	E614-**19	E614	F	N	S2	76	ZM1-30223/001	E613-**5311	E613	F	N	S3
ZC1-41050/004	E614-**20	E614	F	N	S2	77	ZM1-30286/011	E613A1-**5321BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41050/005	E614-**21	E614	F	N	S2	78	ZM1-30224/001	E613-**5411	E613	F	N	S3
ZC1-41051/001	E614-**22	E614	F	N	S2	76	ZM1-30285/005	E613A1-**5415BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41051/002	E614-**23	E614	F	N	S2	76	ZM1-30224/002	E613-**5412	E613	F	N	S3
ZC1-41051/003	E614-**24	E614	F	N	S2	76	ZM1-30304/006	E613A1-**5516BC1	1Z1064A1xE613	F	A1	BC1

ZC1-41051/004	E614-**25	E614	F	N	S2	76	ZM1-30226/001	E613-**5811	E613	F	N	S3
ZC1-41051/005	E614-**26	E614	F	N	S2	76	ZM1-30286/009	E613A1-**5819BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41051/006	E614-**27	E614	F	N	S2	76	ZM1-30227/001	E613-**5911	E613	F	N	S3
ZC1-41052/001	E614-**28	E614	F	N	S2	77	ZM1-30286/007	E613A1-**5917BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41052/002	E614-**29	E614	F	N	S2	77	ZM1-30227/002	E613-**5912	E613	F	N	S3
ZC1-41052/003	E614-**30	E614	F	N	S2	78	ZM1-30286/010	E613A1-**5920BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41052/004	E614-**31	E614	F	N	S2	78	ZM1-30228/001	E613-**6011	E613	F	N	S3
ZC1-41053/001	E614-**32	E614	F	N	S2	76	ZM1-30287/011	E613A1-**6021BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41053/002	E614-**33	E614	F	N	S2	77	ZM1-30229/001	E613-**6111	E613	F	N	S3
ZC1-41053/003	E614-**34	E614	F	N	S2	76	ZM1-30295/008	E613A1-**6118BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41054/001	E614-**35	E614	F	N	S2	77	ZM1-30230/001	E613-**6211	E613	F	N	S3
ZC1-41054/002	E614-**36	E614	F	N	S2	78	ZM1-30288/009	E613A1-**6219BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41054/003	E614-**37	E614	F	N	S2	77	ZM1-30232/001	E613-**6411	E613	F	N	S3
ZC1-41054/004	E614-**38	E614	F	N	S2	83	ZM1-30289/002	E613A1-**6412BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41055/001	E614-**41	E614	F	N	S2	76	ZM1-30233/001	E613-**6511	E613	F	N	S3
ZC1-41055/002	E614-**42	E614	F	N	S2	79	ZM1-30287/010	E613A1-**6520BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41055/003	E614-**43	E614	F	N	S2	76	ZM1-30234/001	E613-**6611	E613	F	N	S3
ZC1-41056/001	E614-**47	E614	F	N	S2	81	ZM1-30291/013	E613A1-**6623BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41056/002	E614-**48	E614	F	N	S2	77	ZM1-30234/002	E613-**6612	E613	F	N	S3
ZC1-41056/003	E614-**49	E614	F	N	S2	79	ZM1-30291/016	E613A1-**6826BC1	1Z1064A1xE613	F	A1	BC1
ZC1-41056/004	E614-**50	E614	F	N	S2	77	ZM1-30238/002	E614-**1112	E614	F	N	S3
ZC1-41056/005	E614-**51	E614	F	N	S2	77	ZM1-30291/014	E614A1-**1224BC1	1Z1064A1xE614	F	A1	BC1
ZC1-41056/006	E614-**52	E614	F	N	S2	78	ZM1-30241/001	E614-**1311	E614	F	N	S3
ZC1-41057/001	E614-**53	E614	F	N	S2	78	ZM1-30292/004	E614A1-**1314BC1	1Z1064A1xE614	F	A1	BC1
ZC1-41057/002	E614-**54	E614	F	N	S2	76	ZM1-30242/001	E614-**1411	E614	F	N	S3
ZC1-41057/003	E614-**55	E614	F	N	S2	79	ZM1-30292/009	E614A1-**1419BC1	1Z1064A1xE614	F	A1	BC1
ZC1-41057/004	E614-**56	E614	F	N	S2	77	ZM1-30244/001	E614-**1711	E614	F	N	S3
ZC1-41058/001	E614-**59	E614	F	N	S2	79	ZM1-30297/014	E614A1-**1724BC1	1Z1064A1xE614	F	A1	BC1
ZC1-41058/002	E614-**60	E614	F	N	S2	75	ZM1-30245/002	E614-**1812	E614	F	N	S3
ZC1-41058/003	E614-**61	E614	F	N	S2	79	ZM1-30297/002	E614A1-**1812BC1	1Z1064A1xE614	F	A1	BC1
ZC1-41058/004	E614-**62	E614	F	N	S2	78	ZM1-30246/001	E614-**1911	E614	F	N	S3
ZC1-41058/005	E614-**63	E614	F	N	S2	75	ZM1-30286/008	E614A1-**1918BC1	1Z1064A1xE614	F	A1	BC1
Z8P-1603	E614-**64	E614	F	N	S2	108	ZM1-30246/002	E614-**1912	E614	F	N	S3

ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30286/012	E614A1-**1922BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30247/001	E614-**2011	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30297/012	E614A1-**2022BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30248/002	E614-**2112	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30306/005	E614A1-**2215BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30250/001	E614-**2311	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30289/009	E614A1-**2319BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30250/002	E614-**2312	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30288/016	E614A1-**2326BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30252/001	E614-**2511	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30296/007	E614A1-**2517BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30254/001	E614-**2711	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30291/015	E614A1-**2725BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30255/001	E614-**2811	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30290/005	E614A1-**2815BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30256/001	E614-**2911	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30291/001	E614A1-**2911BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30259/001	E614-**3211	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30291/010	E614A1-**3220BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30261/001	E614-**3411	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30300/004	E614A1-**3414BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30262/001	E614-**3511	E614	F	N	S3
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30296/004	E614A1-**3514BC1	1Z1064A1xE614	F	A1	BC1
ZM0-30067	1Z1064A1	1Z1064A1	F	A1	S10	ZM1-30263/001	E614-**3611	E614	F	N	S3

R-Lines with a cold tolerance

IDT	GENOTYPE	DER	POOL	PLASMA	GENER
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30217/001	3Z60170-11	IS 30441B x IS 29409B	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30218/001	3Z60171-11	IS 30441B x KELLER	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1
ZC1-30219/001	3Z60172-11	IS 30441B x IS 30435	M	N	S1

IDT	GENOTYPE	DER	POOL	PLASMA	GENER
ZM1-56014/002	3Z60170-1130	IS 30441B x IS 29409B	M	N	S2
ZM1-56014/003	3Z60170-1131	IS 30441B x IS 29409B	M	N	S2
ZM1-56015/001	3Z60170-1135	IS 30441B x IS 29409B	M	N	S2
ZM1-56015/002	3Z60170-1136	IS 30441B x IS 29409B	M	N	S2
ZM1-56015/004	3Z60170-1138	IS 30441B x IS 29409B	M	N	S2
ZM1-56016/001	3Z60170-1141	IS 30441B x IS 29409B	M	N	S2
ZM1-56016/002	3Z60170-1142	IS 30441B x IS 29409B	M	N	S2
ZM1-56016/003	3Z60170-1143	IS 30441B x IS 29409B	M	N	S2
ZM1-56017/001	3Z60170-1147	IS 30441B x IS 29409B	M	N	S2
ZM1-56017/002	3Z60170-1148	IS 30441B x IS 29409B	M	N	S2
ZM1-56017/003	3Z60170-1149	IS 30441B x IS 29409B	M	N	S2
ZM1-56018/001	3Z60170-1153	IS 30441B x IS 29409B	M	N	S2
ZM1-56018/002	3Z60170-1154	IS 30441B x IS 29409B	M	N	S2
ZM1-56018/003	3Z60170-1155	IS 30441B x IS 29409B	M	N	S2
ZM1-56019/001	3Z60170-1159	IS 30441B x IS 29409B	M	N	S2
ZM1-56019/002	3Z60170-1160	IS 30441B x IS 29409B	M	N	S2
ZM1-56019/003	3Z60170-1161	IS 30441B x IS 29409B	M	N	S2
ZM1-56020/001	3Z60170-1165	IS 30441B x IS 29409B	M	N	S2
ZM1-56020/002	3Z60170-1166	IS 30441B x IS 29409B	M	N	S2
ZM1-56020/003	3Z60170-1167	IS 30441B x IS 29409B	M	N	S2
ZM1-56021/002	3Z60171-112	IS 30441B x KELLER	M	N	S2
ZM1-56022/001	3Z60171-116	IS 30441B x KELLER	M	N	S2
ZM1-56022/002	3Z60171-117	IS 30441B x KELLER	M	N	S2
ZM1-56023/001	3Z60171-1121	IS 30441B x KELLER	M	N	S2
ZM1-56023/002	3Z60171-1122	IS 30441B x KELLER	M	N	S2
ZM1-56024/001	3Z60171-1126	IS 30441B x KELLER	M	N	S2
ZM1-56024/002	3Z60171-1127	IS 30441B x KELLER	M	N	S2
ZM1-56025/001	3Z60171-1131	IS 30441B x KELLER	M	N	S2

ZC1-30232/001	3Z60185-11	IS 30308 x IS 30351	M	N	S1
ZC1-30232/001	3Z60185-11	IS 30308 x IS 30351	M	N	S1
ZC1-30232/001	3Z60185-11	IS 30308 x IS 30351	M	N	S1
ZC1-30232/001	3Z60185-11	IS 30308 x IS 30351	M	N	S1
ZC1-30232/001	3Z60185-11	IS 30308 x IS 30351	M	N	S1
ZC1-30232/001	3Z60185-11	IS 30308 x IS 30351	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1
ZC1-30235/001	3Z60188-11	IS 30308 x IS 30435	M	N	S1

ZM1-56100/001	3Z60179-1151	IS 30435 x IS 30451	M	N	S2
ZM1-56100/002	3Z60179-1152	IS 30435 x IS 30451	M	N	S2
ZM1-56101/001	3Z60179-1156	IS 30435 x IS 30451	M	N	S2
ZM1-56101/002	3Z60179-1157	IS 30435 x IS 30451	M	N	S2
ZM1-56102/001	3Z60180-111	IS 30435 x KELLER	M	N	S2
ZM1-56103/001	3Z60180-113	IS 30435 x KELLER	M	N	S2
ZM1-56104/001	3Z60180-115	IS 30435 x KELLER	M	N	S2
ZM1-56105/001	3Z60180-117	IS 30435 x KELLER	M	N	S2
ZM1-56106/001	3Z60180-119	IS 30435 x KELLER	M	N	S2
ZM1-56107/001	3Z60180-1121	IS 30435 x KELLER	M	N	S2
ZM1-56108/001	3Z60180-1123	IS 30435 x KELLER	M	N	S2
ZM1-56109/001	3Z60180-1125	IS 30435 x KELLER	M	N	S2
ZM1-56110/001	3Z60180-1127	IS 30435 x KELLER	M	N	S2
ZM1-56111/001	3Z60180-1129	IS 30435 x KELLER	M	N	S2
ZM1-56112/001	3Z60181-111	IS 30435 x IS 30308	M	N	S2
ZM1-56112/003	3Z60181-113	IS 30435 x IS 30308	M	N	S2