Dataset S1 The list of 492 inbred lines for GWAS analysis

Serial number	Inbreds	27-kD zein[1]
2097	shen5005	low
2101	mei68113	low
2114	N138	low
2120	DM101B	low
2121	D88	low
2129	GN4095	low
2131	LM-2	low
2136	B95	low
2139	SC-9	low
2140	4003	low
2143	KP3130	low
2144	L-1	low
2151	W668	low
2153	W969	low
2154	W968	low
2163	2005-4	low
2167	B394	low
2169	huangchanga	low
2172	huangchangb	low
2173	W499	low
2185	jian1495b	low
2189	T24	low
2196	L473	low
2198	equn4	low
2208	ji444	low
2210	huangyesi3	low
2212	ji63	low
2214	H21	low
2220	MO113	low
2228	zheng32	low
2229	zheng653	low
2236	ye832	low
2248	D869	low
2253	D1049	low
2254	D1051	low
2258	nan21-3	low
2259	K14	low
2261	Q1261	low
2273	200B	low

2284	huangzaosi	low
2290	GY3	low
2294	4936	low
2297	e220	low
2313	R150	low
2318	qi319	low
2319	xing230	low
2328	huotanghuang	low
2329	huo17	low
2341	PH6WC	low
2342	PH4CV	low
2343	hai9-21	low
2345	DH65232	low
2346	JI533	low
2350	A801	low
2355	DF24	low
2361	shen977	low
2370	178	low
2373	150-4	low
2379	9710	low
2380	9711	low
2386	196	low
2391	68122	low
2395	shan89	low
2398	5023	low
2410	1121	low
2416	Ay420	low
2420	A619	low
2424	B76	low
2427	CM105	low
2436	A679	low
2440	W182bn	low
2444	W117	low
2454	CT52C	low
2455	jiao51	low
2457	77	low
2461	yun147	low
2462	HHe01	low
2464	W2H03	low
2475	CT109	low
2476	yu82	low
2477	Lx9801	low
2478	E28	low

2485	han49	low
2494	yi49	low
2500	Lo1125	low
2504	shen135	low
2507	cheng435	low
2510	bai197	low
2519	jinsui54	low
2520	84-126-15-1	low
2533	91huang10	low
2540	chaoxianbai	low
2541	B12	low
2569	lu65	low
2572	yan156	low
2573	yan103	low
2574	yan172	low
2583	200-24-13413	low
2590	jiao05	low
2593	zheng58	low
2597	da255	low
2598	897	low
2599	zhonger/02	low
2604	yue39-4	low
2605	M9	low
2606	shuangM9B-1	low
2608	cai11-8	low
2615	SZ3	low
2620	L069	low
2625	ning37	low
2630	zhongyin15	low
2637	72-125	low
2664	han21	low
2668	huobai	low
2690	F42	low
2692	B47	low
2697	DJ7	low
2710	PHJ75	low
2712	PHN29	low
2716	LH190	low
2717	IBC2	low
2721	PHV78	low
2726	PB80	low
2732	PH207	low
2745	PHK42	low

2746	PHT55	low
2747	OH43	low
2753	LH82	low
2757	IBB14	low
2758	PHH93	low
2760	PHP02	low
2764	78551S	low
2774	LH1	low
2941	LH196	low
2950	PHP76	low
2955	Lp215D	low
2961	PHW30	low
2963	MBSJ	low
2965	LH215	low
2966	MM402A	low
2968	LIBC4	low
2969	83IBI3	low
2973	PHPR5	low
2977	PHNV9	low
2979	ML606	low
2990	IB014	low
2992	LH150	low
3003	IBB15	low
3006	11430	low
3013	NS501	low
3014	OQ603	low
3026	L127	low
3027	L135	low
3028	L139	low
3032	PHK35	low
3033	PHM10	low
3034	PHN37	low
3037	PHP55	low
3041	PHT22	low
2099	R31	medium
2104	DH138	medium
2105	DH149	medium
2108	B7	medium
2109	R08	medium
2113	1145	medium
2117	L061M	medium
2119	F7584	medium
2122	D619	medium

2123	D15	medium
2124	DM07	medium
2126	D1139	medium
2130	C521	medium
2138	SC-14	medium
2145	W172	medium
2146	SW153	medium
2156	18	medium
2157	1614	medium
2158	1610	medium
2168	changK	medium
2175	SC30-1	medium
2176	468-3	medium
2179	XF134	medium
2180	M131-5	medium
2182	XOP2	medium
2183	R1656	medium
2184	jian1495a	medium
2190	Lo415	medium
2191	D20	medium
2193	FC-13	medium
2194	L05-6	medium
2197	equn3	medium
2201	08-64	medium
2202	697	medium
2215	shuang741	medium
2217	ji434	medium
2219	ji4112	medium
2221	xi502	medium
2224	luyuan92	medium
2225	S22	medium
2226	ye515	medium
2227	ye8112	medium
2235	tie7922	medium
2239	chang72	medium
2242	yan812	medium
2244	D854	medium
2245	D857	medium
2246	D856	medium
2247	D864	medium
2249	D881	medium
2252	D978	medium
2257	yu87-1	medium

2265	suwan1611	medium
2269	1205A	medium
2270	su75	medium
2274	3489a	medium
2276	P138	medium
2277	N68a	medium
2278	K12	medium
2280	619	medium
2281	shen137	medium
2282	3335	medium
2293	5032	medium
2303	99122	medium
2304	chong72	medium
2305	M1016	medium
2307	P25	medium
2310	d140	medium
2311	W9706	medium
2316	chengzi2142	medium
2321	20837	medium
2335	SC14	medium
2340	9058	medium
2353	DF27	medium
2357	1127	medium
2359	7236	medium
2360	433-7	medium
2374	P007	medium
2377	9702	medium
2381	y9961	medium
2385	Yd6	medium
2387	huangyesi	medium
2389	wu126	medium
2394	M22	medium
2397	yi36	medium
2399	ji853	medium
2400	zi330	medium
2404	8701	medium
2408	F7	medium
2414	dan598	medium
2417	OH7	medium
2421	A554	medium
2423	A632	medium
2430	NC268	medium
2431	B37	medium

2442	W64A	medium
2445	HP301	medium
2459	zhen367	medium
2460	daqing133	medium
2463	mu6	medium
2471	9101-7	medium
2488	ziyu3	medium
2490	M3736	medium
2495	yi67	medium
2497	song1145	medium
2506	zhangjin6	medium
2525	lan766-4-2	medium
2532	91huang5	medium
2536	785	medium
2550	liao5110	medium
2562	fu8527	medium
2565	fu8701	medium
2566	longkang1	medium
2571	yan38	medium
2580	qi410	medium
2581	luyuan133	medium
2588	32	medium
2589	zhengbai11	medium
2591	6	medium
2594	shuangtaiwu	medium
2595	chang7daxian1	medium
2601	75-24	medium
2609	15-14gao	medium
2610	17564	medium
2611	030-1	medium
2618	L005	medium
2635	ZPON7	medium
2638	75-364	medium
2649	H114	medium
2651	CML125-2（pianma）	medium
2653	DH65232(DH9)	medium
2663	Lo1067	medium
2665	chang69	medium
2667	luosu3	medium
2672	xingK36	medium
2684	ES40	medium
2687	LH52	medium
2688	78002A	medium

2694	PHN11	medium
2699	PHG72	medium
2700	B09	medium
2701	LH156	medium
2702	PHZ51	medium
2704	PHW43	medium
2706	PHW52	medium
2708	PHJ31	medium
2711	PHM57	medium
2714	795	medium
2718	PHK05	medium
2719	PHK24	medium
2720	PHR25	medium
2722	78004	medium
2723	LH60	medium
2725	PHG71	medium
2727	FAPW	medium
2730	PHG35	medium
2731	PHJ40	medium
2734	B73	medium
2737	LH123HT	medium
2738	LH38	medium
2740	LH74	medium
2741	LH132	medium
2749	HBAI	medium
2750	PHG50	medium
2752	Pa91	medium
2756	HB8229	medium
2759	PHM44	medium
2763	PHT10	medium
2766	PHG24	medium
2767	FBHJ	medium
2772	LH149	medium
2777	PHT77	medium
2779	LH145	medium
2780	PHG47	medium
2940	LH127	medium
2945	LH202	medium
2947	LH192	medium
2948	LH193	medium
2954	LH208	medium
2958	PHN66	medium
2959	PHR55	medium

2960	PHR58	medium
2964	MBUB	medium
2970	NQ508	medium
2971	PHBA6	medium
2972	PHP85	medium
2974	PHR30	medium
2975	PHT69	medium
2978	PHWG5	medium
2983	LH119	medium
2984	MDF-13D	medium
2989	6103	medium
2998	PHW17	medium
3000	NS701	medium
3004	787	medium
3005	W8304	medium
3007	2369	medium
3010	87916W	medium
3018	1538	medium
3019	CR14	medium
3029	W8555	medium
3035	PHN73	medium
3036	PHN82	medium
3038	PHP60	medium
3042	PHV37	medium
3044	2FACC	medium
3047	478	medium
3049	huangC	medium
3050	D340	medium
2204	K10	medium
2213	ji846	medium
2230	hu803	medium
2240	wu109	medium
2250	D883	medium
2275	Z31B	medium
2285	WN11H	medium
2298	DF32	medium
2308	SS99	medium
2363	niu2-1	medium
2382	1101	medium
2405	siyi	medium
2412	xun971	medium
2439	Sg1533	medium
2441	Va26	medium

2474	yu537A	medium
2505	zhangxi28	medium
2513	H2	medium
2521	xinlun5-9	medium
2640	MP704	medium
2728	LH61	medium
2962	29MIBZ2	medium
2988	CR1HT	medium
2991	MBNA	medium
3016	S8324	medium
3017	S8326	medium
3021	WIL901	medium
2103	757	high
2107	B4	high
2115	E600	high
2118	L061F	high
2125	SC24-1	high
2127	W222	high
2128	Y223	high
2135	B98	high
2142	PN2-8	high
2148	W238	high
2162	M101	high
2165	E601	high
2166	E588	high
2171	D33A	high
2178	XF223	high
2192	chang7-2	high
2199	PN2	high
2200	18-599	high
2211	zaC546	high
2238	yu374	high
2243	qi205	high
2251	D886	high
2260	cheng698-3	high
2262	ye52106	high
2264	ye8001	high
2272	R017	high
2289	fangyin	high
2300	7903E	high
2309	BM	high
2312	R25	high
2324	Los-6	high

2327	XF27	high
2333	802	high
2334	SC11-1	high
2351	8982	high
2352	DF20	high
2358	P167	high
2362	K22	high
2364	68139	high
2376	M3	high
2383	3189	high
2390	W344	high
2422	Ms71	high
2426	ND246	high
2428	Mo24W	high
2437	Co109	high
2443	W153R	high
2446	4722	high
2452	shangyin110-1	high
2453	7146	high
2458	7327	high
2468	140	high
2472	xun92-8	high
2482	zhong128	high
2483	zhong451	high
2484	zhonghuang64	high
2489	guangyou5	high
2491	daMO	high
2511	ji432	high
2524	xuan6	high
2530	91huang15	high
2534	chihuang14	high
2543	fu96	high
2547	liao2202	high
2548	liao2204	high
2549	liao7794	high
2559	96201	high
2560	gan41	high
2568	2005	high
2587	guan17-1	high
2603	yue89E4-2	high
2616	wu125	high
2624	ning24	high
2626	ning45	high

2631	NN14B	high
2669	yuanwu05	high
2686	H127	high
2691	LH93	high
2693	807	high
2696	LH54	high
2713	PHW03	high
2733	Mo17	high
2742	Seagu1117	high
2748	LH65	high
2755	78371A	high
2943	LH162	high
2949	RS710	high
2952	BCC03	high
2953	LH128	high
2956	PHK93	high
3008	2MA22	high
3009	6M502	high
3011	MBST	high
3020	WIL900	high
3024	E8501	high
3025	J8606	high
3043	PHW20	high

27-kD zein[1] refers to the expression levels of 27-kDa γ-zein in different inbred lines analyzed by SDS-PAGE. Low represents that the expression of 27-kDa γ-zein is lower than B73, medium similar to B73, high higher than B73.