

No.	Corn protein				Best' aligned allergen using FASTA (ktup=2)					本調査	
	Accession No.	Description	True	Length, aa	Matches 8aa 1	E score	%ID (aa overlap) 2	Best Hit Description (Accession No.)	Length, aa	MAST 3	BLAST 4
1	A55092	catalase		493	0	4.0E-01	16.667%(126)	glutenin low molecular weight chain precursor (B-I, clone pB312) - wheat (fragment) (T06506)	323	-	-
2	AAA33523	16 kDa zein		183	0	9.1E-05	35.882%(170)	Low molecular weight glutenin (Fragment) (Q41550)	229	-	-
3	AAA68209	Sus1 gene product		816	0	1.8E+00	30.000%(60)	Thaumatin-like protein precursor (P50694)	245	-	-
4	AAA73960	kaurene synthase		823	0	1.8E+00	18.103%(116)	Paramyosin allergen (Q8MUF6)	875	-	-
5	AAA87580	GAPDH		337	0	6.0E-02	26.316%(152)	Mite allergen Eur m 3 precursor (EC 3.4.21.-) (O97370)	261	-	-
6	AAB71078	ribosomal protein P3a		119	1	2.6E-08	74.468%(47)	60S acidic ribosomal protein P2 (Minor allergen Fus c 1) (Q8TFM9)	109	1.80E-08	-
7	AAB86960	profilin		131	1	2.1E-56	100.000%(131)	Profilin 4 (ZmPRO4) (O22655)	131	5.50E-41	-
8	AAC72193	pyruvate dehydrogenase		374	0	1.1E+00	25.510%(98)	Parvalbumin beta protein (Q8JIT9)	109	-	-
9	AAC78468	RNA polymerase sigma factor		349	0	1.2E+00	19.792%(96)	Gamma-gliadin (Gliadin B-III) (Fragment) (P04730)	244	-	-
10	AAC79953	anionic peroxidase H		253	0	1.6E+00	22.047%(127)	Prepro-cucumisin precursor (Q39547)	731	-	-
11	AAK26754	plasma membrane integral protein ZmPIP-3		292	0	1.2E-01	26.667%(90)	Nonspecific lipid-transfer protein precursor (LTP) (Allergen Mal d 3) (Q9M5X7)	115	-	-
12	AAK30114	teosinte branched protein 1		132	0	2.5E+00	36.842%(38)	Keratin, type II cytoskeletal 6A (Cytokeratin 6A) (CK 6A) (K6a keratin) (P02538)	563	2.40E-05	-
13	AAK51777	MURB-like transposable element		207	0	1.2E+00	28.395%(81)	Mite allergen Der f 7 precursor (Der f VII) (Q26456)	213	5.20E-04	-
14	AAK51786	MURB-like protein hMURB12		207	0	3.1E-01	23.529%(102)	2S albumin - Brazil nut (S14947)	154	2.80E-04	-
15	AAK56122	alpha-expansin 4		197	9	1.7E-73	81.218%(197)	Orf protein (Q41043)	258	-	Swissprot:Q41043 1.0e-101
16	AAK56130	beta-expansin 7		268	10	2.5E-75	82.463%(268)	Beta-expansin precursor (Beta-expansin EXPB3) (Q9LD11)	268	4.70E-75	Swissprot:Q9FWF3 6e-24
17	AAK59898	kaurene synthase A		202	0	1.6E+00	28.395%(81)	Similar to pollen allergen-like protein (Q9SNH7)	284	-	-
18	AAK60245	teosinte branched protein		317	0	7.7E-01	30.108%(93)	Parvalbumin beta (Allergen Sco j 1) (P59747)	108	1.20E-03	-
19	AAK60502	sucrose export defective 1		474	0	1.1E-01	29.070%(86)	Beta-expansin precursor (Q9LD07)	327	-	-
20	BAA05550	Lea group 3 protein		221	0	2.9E-08	40.952%(105)	Putative LEA III protein isoform 1 (Q93XL5)	109	7.50E-05	SwissProt:Q42376 1e-12
21	BAA22410	Ca+ protein kinase-kinase		452	0	1.3E+00	22.472%(89)	Beta-expansin (O24230)	261	-	-
22	CAA28734	40.1 kDa A1 protein		622	0	5.9E-01	30.435%(46)	Cu/Zn super-oxide dismutase (EC 1.15.1.1) (Superoxide dismutase [Cu-Zn]) (Q8L5E0)	152	-	trembl:O81355 0.03
23	CAA31221	cytochrome oxidase su III		265	0	3.6E-01	30.435%(46)	Cu/Zn super-oxide dismutase (EC 1.15.1.1) (Superoxide dismutase [Cu-Zn]) (Q8L5E0)	152	-	-
24	CAA35589	pyruvate decarboxylase		610	0	9.9E-01	28.571%(91)	Alcohol dehydrogenase 1 (EC 1.1.1.1) (40 kDa allergen) (Allergen Cand a 1) (Can a 1) (Can a I) (P43067)	350	-	-

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25	CAA37038	dihydrodipicolinate		380	0	2.0E+00	22.892%(83)	Phospholipase A1 1 precursor (EC 3.1.1.32) (Allergen Dol m 1.01) (Dol m I) (Fragment) (Q06478)	317	-	-
26	CAA39438	ribosomal protein S11		159	0	6.6E-01	36.538%(52)	Cu/Zn super-oxide dismutase (EC 1.15.1.1) (Superoxide dismutase [Cu-Zn]) (Q8L5E0)	152	-	-
27	CAA60366	hypothetical plastid protein		139	0	2.8E+00	43.333%(30)	Enolase (EC 4.2.1.11) (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Q96X46)	438	-	-
28	CAA72196	cytochrome p450		538	0	5.2E-01	32.632%(95)	Soybean beta-conglycinin-alpha subunit (Fragment) (S16334)	218	1.60E-02	-
29	CAA87634	unknown function w/PELTALA2-like binding domain		485	0	1.8E+00	22.642%(159)	GLU-B1-1B HMW glutenin subunit. Ammonia monooxygenase (Fragment). (A30843)	789	-	-
30	CAB56627	SBP domain protein 1		440	0	1.9E+00	31.579%(57)	Pollen allergen Amb a 1.4 precursor (Antigen E) (Antigen Amb a I) (P28744)	392	3.90E-03	-
31	CAC18100	putative legumain		485	0	1.0E+00	27.586%(87)	Arginine kinase (EC 2.7.3.3) (AK) (Allergen Plo i 1) (Q95PM9)	355	-	-
32	CAC35069	VIP3 protein		126	0	1.5E-01	25.893%(112)	Tropomyosin (Allergen Met e 1) (Met e I) (Q25456)	274	3.70E-03	-
33	JC1524	major allergen m1,pollen allergen		191	1	5.9E-79	100.000%(191)	Beta-expansin 1b (Pollen allergen Zea m 1) (Zea m I) (Fragment) (Q07154)	191	2.30E-42	swissprot:Q9FWF35e-24
34	O24578	adenylosuccinate synthetase precursor		487	0	1.3E+00	33.333%(45)	Mite group 2 allergen Tyr p 2 precursor (O02380)	141	4.80E+00	-
35	P04705	zein alpha-precursor		186	0	4.6E-03	31.720%(186)	Glutenin, low molecular weight subunit precursor (P10385)	356	6.70E-03	-
36	P15590	embryo globulin-1		573	1	1.9E-42	42.490%(506)	7S globulin (Q9AUD0)	585	2.40E-63	-
37	P33489	auxin-binding protein-5		150	0	2.5E+00	25.773%(97)	2S albumin (Q9AUD1)	153	2.10E-01	-
38	P40280	histone H2a		159	0	3.9E+00	33.708%(89)	60S acidic ribosomal protein P2 (Allergen Cla h 3) (Cla h III)	111	-	-
39	P46251	actin depolymerizing factor		139	0	1.5E+00	37.931%(29)	Polcalcin Bra r 1/Bra n 1 (Calcium-binding pollen allergen Bra r 1/Bra n 1) (Q42470)	79	-	-
40	P51059	phosphoenolpyruvate carboxylase 2		967	0	9.8E-01	20.896%(201)	Tropomyosin (Q9GZ71)	284	6.10E+00	-
41	PWZMAM	F1 ATPase mitochondria		508	0	1.3E+00	25.641%(117)	Superoxide dismutase [Mn], mitochondrial precursor (EC 1.15.1.1) (Allergen Asp f 6) (Q92450)	210	-	-
42	S12043	leucoanthocyanidin dioxygenase		395	0	4.8E-01	26.471%(136)	Major pollen allergen Pha a 5.1 precursor (Pha A 5) (Clone 28) (P56164)	320	3.30E+00	-
43	S30062	polygalacturonase		95	1	1.9E-10	35.556%(90)	Possible polygalacturonase precursor (EC 3.2.1.15) (PG) (Pectinase) (Major pollen allergen Cry j 2) (Cry j II) (P43212)	514	-	swissprot:P432122e-11
44	S37379	catalase 3		496	0	7.8E-01	20.354%(113)	glutenin low molecular weight chain precursor (B-I, clone pB312) - wheat (fragment) (T06506)	323	-	-
45	S58532	chloroplast matK protein		544	0	2.5E-01	24.752%(101)	Alpha/beta-gliadin A-II precursor (Prolamin) (P04722)	291	-	-

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46	T02242	GTP-binding protein rab2		209	0	1.7E+00	22.105%(95)	Hyaluronoglucosaminidase (EC 3.2.1.35) (Hyaluronidase) (Allergen Ves v 2) (Ves v II) (P49370)	331	-	-
47	T02763	probable malate dehydrogenase		652	14	8.8E-200	76.491%(570)	NADP-dependent malate dehydrogenase (Decarboxylating) (EC 1.1.1.40) (Malic enzyme)	570	4.50E+00	swissprot:Q9SDL20.0
48	T02990	cinnamyl alcohol dehydrogenase		367	1	1.5E-28	30.409%(342)	Alcohol dehydrogenase 1 (EC 1.1.1.1) (40 kDa allergen) (Allergen Cand a 1) (Can a 1) (Can a I) (P43067)	350	4.50E+00	swissprot:P430672e-18
49	T02993	Ca+ protein kinase		531	0	4.6E-07	37.931%(145)	Polcalcin Jun o 2 (Calcium-binding pollen allergen Jun o 2)	165	4.10E-03	swissprot:O649432e-15
50	T03397	hypothetical protein		132	0	1.1E+00	22.642%(106)	Beta-expansin 1b (Pollen allergen Zea m 1) (Zea m I) (Fragment) (Q07154)	191	6.70E-02	-
合計						10					10

1 連続する8個以上のアミノ酸配列が1個以上あれば網掛

2 %ID > 35% かつ aa overlap > 80の場合網掛け

3 MASTのE-valueが1.0e-7以下のとき網掛け

4 BLASTのE-valueが1.0x10-8以下のとき網掛け