

**List of Updates to the WHO/IUIS Allergen Nomenclature Database**

Inhaled, indoor								
Allergen	Isoallergen	PDB Entry	Identity	Isoallergen	PDB Entry	Identity	< 25% Identity	Notes
Blo t 19	19.0101	2MFJ	100.0%					
Blo t 12	12.0101	2MFK	89.1%					
Der f 1	1.0106	3D6S/3RVV	100.0%					
Der p 1	1.0105	1XKG &	99.1%	1.0102	3RVW, 3RVX, 4PP1, 4PP2	100.0%		&: C to A + N52D, otherwise 100% Der p 1.0105 (also *)
		2AS8/3F5V *	99.6%					
Der f 13	13.0101	2A0A	100.0%					
Bla g 5	5.0101	4Q5R	100.0%					
Blo t 8	8.0101	4Q5N	100.0%					
Der p 8	8.0101	4Q5Q	100.0%					
Bla g 1	1.0101	4JRB	100.0%					
Bla g 2	2.0101	3LIZ_A *	99.7%					4RLD is the KKF mutant. The others would be 100% identical to 0101, but they have a silenced N-glycosylation site.
		1YG9/2NR6_A *	99.7%					
		4RLD *, &	98.8%					
Der f 2	2.0101	2F08/1AHK/1AHM/1WRF	100.0%	2.0103	1XWV	100.0%		
Der p 2	2.0101	1KTJ/1A9V	100.0%					
Bla g 4	4.0101	3EBK/4N7D	96.6%					
Bos d 2	2.0101	1BJ7/4WFFU/4WFFV	100.0%					
Can f 2	2.0101	3L4R	100.0%					
Can f 4	4.0101	4ODD	97.5%					
Mus m 1	1.0101	1MUP	100.0%	1.0102	1JV4, 1DF3	99.4%		
		1JV4/1DF3	99.4%					
Per a 4	4.0101	3EBW	96.9%					The Per a 4 sequence is not in WHO/IUIS database, and was obtained from google
Rat n 1	1.0101	2A2G/2A2U	99.4%					Rat n 1 entry - 1MUP (actually belongs to Mus m 1)
Der f 7	7.0101	3UV1	99.0%					
Der p 7	7.0101	3H4Z	100.0%					
Blo t 5	5.0101	2JMH/2JRK/2MEY	100.0%					
Blo t 21	21.0101	2LM9	100.0%					
Der p 5	5.0101	3MQ1	100.0%					
Fel d 1	1.0101	1PUO	77.2%					"1.0101 chain 1" as listed in WHO/IUIS database
		1ZKR/2EJN	90-98.6%					

Inhaled, outdoor								
Allergen	Isoallergen	PDB Entry	Identity	Isoallergen	PDB Entry	Identity	< 25% Identity	Notes
Zea m 1	1.0101	2HCZ	97.4%					
Hev b 2	2.0101	4HPG/4IIS	96.5%					
Ole e 9	9.0101	2JON	98.0%					
Asp f 11	11.0101	2C3B	100.0%					
Art v 1	1.0101	2KPY	100.0%					
Phl p 1	1.0102	1N10	100.0%					
Phl p 2	2.0101	1WHO/1WHP/2VXQ_A/ 1BMW	100.0%					
Phl p 3 (should be Phl p 2)	2.0101	3FT1/3FT9/2JNZ	57.3%					The Phl p 3 sequence is no longer in WHO/IUIS database, because Phl p 2 comprises groups 2 and 3.
Chi t 1	1.0101	1ECA/1ECO/1ECD/1ECN	99.3%					
Hev b 6	6.01	1Q9B/1HEV/1TOW	100.0%					Hev b 6.02 and Hev b 6.03 are just segments of Hev b 6.01
		1WKX	97.7%					
Equ c 1	1.0101	1EW3	100.0%					
Asp f 6	6.0101	1KKC	100.0%					
Cla h 8	8.0101	3GDF/3GDG	100.0%					
Asp f 1	1.0101	1AQZ	98.7%					
Phl p 4	4.0201	3TSH/3TSJ it seems 2 *	99.6%					
		4PVE it seems 2*+1 aa change	99.4%					
		4PVJ/4PWB 2*+1 aa change	99.2%					
		4PVK/4PWC	99.0%					
Bet v 1	1.0112	1BV1/1FSK_A/1BTV	100.0%	1.0101	4QIP/4MNS/4BTZ/4A88	100.0%		3K78 has been listed as "obsolete" in PDB
		1LLT	99.4%		4BKC/4BKD, 4BK7, 1B6F	99.4%		
		1QMR	97.5%	1.0106	4A8U	100.0%		
	1.0107	1FM4	100.0%					
Jun a 1	1.0101	1PXZ	100.0%					1.010101 needs to be corrected to 1.0101 in WHO/IUIS database
Bet v 4	4.0101	1H4B	100.0%					
Che a 3	3.0101	2OPO	100.0%					
Phl p 7	7.0101	1K9U/2LVK/2LVJ/2LVI	100.0%					
Ara t 8	???	1AOK/3NUL	???					The Ara t 8 sequence is not in WHO/IUIS database

Bet v 2	2.0101	1CQA	96.2%					
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Hev b 8	8.0204 1G5U	99.2%						
Equ c 3	3.0101 3V08	100.0%				1UOR is for human, so it should be removed from the database		
Asp o 21	21.0101 6TAA/7TAA	99.4%	21.0101 2TAA	97.3%				
Alt a 1	1.0101 3V0R	100.0%	1.0102 4AUD	99.2%				
Amb t 5	5.0101 1BBG/2BBG/3BBG	100.0%						
Ole e 6	6.0101 1SS3	100.0%						
Phl p 6	6.0101 1NLX	100.0%						
Phl p 5	5.0201 1L3P	99.0%	5.0204 1L3P	99.0%				
	5.0202 1L3P	99.0%	5.0206 1L3P	99.0%				
	5.0203 1L3P	99.0%						
Ingested, food								
Allergen	Isoallergen	PDB Entry	Identity	Isoallergen	PDB Entry	Identity	< 25% Identity	Notes
Ara h 3	3.0101 3C3V		95.5%					
Gly m 6	6.0101 1FXZ		100.0%	6.0501 2D5H/2D5F, 1OD5		100.0%		
Pru du 6	6.0101 3FZ3		99.1%					
Ara h 2	2.0101 3OB4		100.0%					
Ara h 6	6.0101 1W2Q		92.7%					
Ber e 1	1.0101 2LVF		94.7%					1GYS is an homology model in PDB. So it should be removed from the database
Bra n 1	1.0101 1PNB:B		53.8%					
Ric c 1	1.0101 1PSY		97.6%					
Ara h 1	1.0101 3SMH		99.8%	1.0101 3S7E/3S7I		100.0%		
Gly m 5	5.0302	1IPK	100.0%	5.0301 1IPJ		100.0%		
		1UIJ	99.5%					
Pis s 1							3KSC, 1PNB	
Tri a 18	Tri a 18.0101	9WGA/2WGC	97.1%.					
		4AML/2X3T/2UVO, 2CWG/1WGC/7WGA	100.0%					
Bos d 4	4.0101	1F6R/1F6S/2G4N	100.0%					
		1HFZ	99.2%					
		1HFX	94.3%					
		1HFX	67.8%					
Mus a 5	??? 2CYG		???					The Mus a 5 sequence is not in WHO/IUIS database

Bos d 5	5.0101	1BSO/2AKQ 1UZ2 1GX8/1GX9/1GXA/2R56	98.8% 98.1% 100.0%			& 1UZ2 is like 1BSO plus a C121S mutation
Act d 1 hom.	1.0101	2ACT 1AEC	92.3% 99.1%			Act c 1 is not in the database
Act c 5	5.0102	4PMK	100.0%			
Gal d 4	4.0101	1LYZ/1YQV_Y/1FDL_Y/ 1MLC_E/3HFM_Y/ 1DQJ_C/1GXV/1GXX/ 2LYM 1H6M	100.0%   99.2%			
Pru p 3	3.0102	2ALG/2B5S	100.0%			
Tri a 14	14.0101	1BWO	100.0%			
Zea m 14	14.0101/14.0102	1FK0/1FK1/1FK2/1FK3/ 1FK4/1FK5/1FK6/1FK7/1 MZL/ 1MZM/1AFH	100.0%			Zea m 14.0101 and Zea m 14.0102 have identical sequences
Gal d 2	2.0101	1UHG/1OVA 1JTI	100.0% 99.5%			
Gal d 3	3.0101	1N04/1AIV/1OVT/1RYX/ 1NNT 1IEJ 2D3I 1TFA	100.0%  99.4% 99.7% 99.1%			
Cyp c 1	1.0102	4CPV/5CPV	97.2%			
Gad m 1	1.0201	2MBX	100.0%			
Act d 11	11.0101	4IGV/4IGW/4IGX/4IGY/ 4IH0/4IH2/4IHR	100.0%			
Api g 1	1.0101	2BK0	100.0%			
Ara h 8	8.0101	4MAP/4MA6/4M9W/ 4M9B	100.0%			
Dau c 1	1.0101/ 1.0102/ 1.0104/ 1.0105	2WQL	97.4%			Dau c 1.0101, 1.0102, 1.0104 and 1.0105 are identical
Fra a 1	1.0102	2LPX	97.5%			
Gly m 4	4.0101	2K7H	100.0%			

Pru av 1	1.0101	1E09 1H2O	100.0% 99.4%					
Vig r 6	6.0101	2FLH, 3COV	99.4%					
Ara h 5	5.0101	4ESP	92.3%					
Bos d 6	6.0101	3V03/4F5S/4JK4	99.8%					
Ani s 5	5.0101	2MAR	100.0%					
Act d 2	2.0101	4BCT	100.0%					
Mal d 2	2.0101	3ZS3	100.0%					
Mus a 4	4.0101	1Z3Q	100.0%					
Pru av 2	2.0101	2AHN	100.0%					
Injected								
Allergen	Isoallergen	PDB Entry	Identity	Isoallergen	PDB Entry	Identity	< 25% Identity	Notes
Ves v 5	5.0101	1QNX	99.5%					
Arg r 1	1.0101	2X45	100.0%	1.0101	2X46	99.3%		
Api m 2	2.0101	1FCQ/1FCU/1FCV/2J88	100.0%					
Ves v 2	2.0101/ 2.0201	2ATM	59.0%					Ves v 2.0101 and Ves v 2.0201 have identical sequences
Api m 4	4.0101	2MLT/1BH1	100.0%					
Api m 1	1.0101	1POC	100.0%					
Aed a 2	2.0101	3DXL/3DY9/3DYE/3DZT	96.4%					
Sol i 2	2.0101	2YGU	100.0%					
Sol i 3	3.0101	2VZN	100.0%					
Other routes of exposure (infected through skin)								
Allergen	Isoallergen	PDB Entry	Identity	Isoallergen	PDB Entry	Identity	< 25% Identity	Notes
Asc s 13	13.0101	4Q5F	100.0%					
Mala s 1	1.0101	2P9W	99.7%					
Mala s 6	6.0101	2CFE	100.0%					
Mala s 13	13.0101	2J23	100.0%					

\* N-glycosylation site was silenced  
& Mutant

Need of revision in the WHO/IUIS database

PDB entries to be added to the database are in those two columns