

Table S3: The detailed information about *NtZF-HD* genes and NtZF-HD proteins in tobacco.

Gene name	Lcus name	ORF (bp)	Length (aa)	PI	Mol.wt (kDa)	Domain (start-end)		location	Subcellular Localization
NtZHD1	Nitab4.5_0003309g0010.1	546	181	9.04	20.28	8-67	Nt06	113975771...113976316 (+strand)	Nuclear
NtZHD2	Nitab4.5_0001418g0030.1	3078	1025	6.41	113.63	790-844	Nt07	96976123...96982607 (-strand)	Nuclear
NtZHD3	Nitab4.5_0002224g0080.1	798	265	8.88	29.5	48-102	Nt12	111194877...111196404 (+strand)	Nuclear
NtZHD4	Nitab4.5_0000014g0020.1	672	223	9.7	25.66	57-113	Nt12	32300289...32300960 (+strand)	Nuclear
NtZHD5	Nitab4.5_0001507g0130.1	765	254	7.41	28.44	52-106	Nt12	90169840...90170782 (-strand)	Nuclear
NtZHD6	Nitab4.5_0006178g0010.1	741	246	8.67	27.81	56-110	Nt10	42535149...42535889 (-strand)	Nuclear
NtZHD7	Nitab4.5_0001122g0170.1	726	241	6.79	27.37	54-108	Nt16	3290623...3292490 (+strand)	Nuclear
NtZHD8	Nitab4.5_0002472g0040.1	648	215	10.04	24.3	47-103	Nt16	39218342...39218989 (-strand)	Nuclear
NtZHD9	Nitab4.5_0000136g0410.1	864	287	9.26	32.34	104-155	Nt17	89101573...89102445 (-strand)	Nuclear
NtZHD10	Nitab4.5_0000274g0220.1	1071	356	8.76	39.1	66-122	Nt17	104345979...104347049 (-strand)	Nuclear
NtZHD11	Nitab4.5_0000564g0050.1	483	160	9	18.03	26-78	Nt17	162919345...162920954 (+strand)	Nuclear
NtZHD12	Nitab4.5_0003247g0060.1	765	254	8.04	28.76	48-79	Nt19	130006610...130007980 (-strand)	Nuclear
NtZHD13	Nitab4.5_0000460g0070.1	786	261	8.47	29.76	67-121	Nitab4.5_0000460	605752...606537 (-strand)	Nuclear
NtZHD14	Nitab4.5_0000948g0160.1	531	176	6.98	19.5	14-66	Nitab4.5_0000948	456370...456900 (-strand)	Chloroplast,Nucleus
NtZHD15	Nitab4.5_0000948g0180.1	552	183	9.06	20.87	9-60	Nitab4.5_0000948	478268...479407 (-strand)	Nuclear
NtZHD16	Nitab4.5_0000948g0190.1	984	327	7.44	35.96	24-74	Nitab4.5_0000948	474971...476529 (-strand)	Nuclear
NtZHD17	Nitab4.5_0001759g0020.1	870	289	8.82	31.94	75-129	Nitab4.5_0001759	147719...149283 (+strand)	Nuclear
NtZHD18	Nitab4.5_0005164g0020.1	819	272	7.77	30.49	47-95	Nitab4.5_0005164	50007...51473 (-strand)	Nuclear

NtZHD19	Nitab4.5_0003597g0010.1	681	226	6.9	25.7	50-104	Nitab4.5_0003597	142958...143638 (+strand)	Nuclear
NtZHD20	Nitab4.5_0005738g0020.1	2574	857	6.79	94.11	739-793	Nitab4.5_0005738	77234...84914 (-strand)	Nuclear
NtZHD21	Nitab4.5_0002025g0010.1	687	228	6.79	25.69	51-105	Nitab4.5_0002025	16169...16855 (+strand)	Nuclear
NtZHD22	Nitab4.5_0001960g0020.1	936	311	8.02	35.02	102-156	Nitab4.5_0001960	43239...44174 (+strand)	Nuclear
NtZHD23	Nitab4.5_0002698g0010.1	501	166	7.5	18.38	9-63	Nitab4.5_0002698	14422...21460 (-strand)	Nuclear
NtZHD24	Nitab4.5_0002698g0080.1	591	196	9.86	22.57	11-62	Nitab4.5_0002698	90457...91694 (-strand)	Nuclear
NtZHD25	Nitab4.5_0002698g0100.1	996	331	6.37	36.07	24-78	Nitab4.5_0002698	87577...89089 (-strand)	Nuclear
NtZHD26	Nitab4.5_0018250g0010.1	936	311	8.24	34.8	102-156	Nitab4.5_0018250	4332...5267 (-strand)	Nuclear
NtZHD27	Nitab4.5_0004308g0050.1	1077	358	8.7	39.28	69-125	Nitab4.5_0004308	111992...113068 (+strand)	Nuclear
NtZHD28	Nitab4.5_0008838g0010.1	417	138	10.25	15.59	27-79	Nitab4.5_0008838	42640...44329 (+strand)	Nuclear
NtZHD29	Nitab4.5_0008838g0020.1	1077	358	8.18	38.74	65-121	Nitab4.5_0008838	97301...98377 (-strand)	Nuclear
NtZHD30	Nitab4.5_0007822g0010.1	717	238	8.02	26.96	50-104	Nitab4.5_0007822	23092...24551 (-strand)	Nuclear
NtZHD31	Nitab4.5_0000128g0140.1	690	229	7.97	25.88	50-104	Nitab4.5_0000128	555877...557276 (-strand)	Nuclear
NtZHD32	Nitab4.5_0008595g0010.1	1086	361	8.18	39.24	68-124	Nitab4.5_0008595	97991...99076 (-strand)	Nuclear

ORF, open reading frame; bp, base pair; aa, amino acid, pI, isoelectric point; kDa, kilodaltons.