

Table 1 physico-chemical properties of *DFR* cDNAs and their amino acid sequences of several typical higher plant species

Physico-chemical properties	Jianchuanhong	Zhuanxinwu	Heimeiren	AF449422.1 <i>Solanum tuberosum</i> L.	AY954035.1 <i>Solanum pinnatisectum</i> L.	FJ969389.1 <i>Nicotiana glauca</i>	NM_123645.3 <i>Arabidopsis thaliana</i>	AY210885.1 <i>Triticum aestivum</i>
Number of amino acid residue (aa)	381	381	381	381	381	381	381	354
Molecular weight (kD)	42.47	42.47	42.71	42.70	42.78	42.32	42.77	38.46
Theoretical isoelectric point (pI)	5.71	5.81	6.03	6.20	5.75	5.64	5.43	5.42
Molar extinction coefficient	1.080	1.080	1.106	1.105	1.139	1.119	1.073	0.892
Protein instability index	31.77	31.55	32.67	33.15	30.97	34.10	36.85	33.45
Kinds of amino acid	20	20	20	20	20	20	20	20
The most abundant amino acids (%)	Lys,Ala/8.1;Leu/7.9; Glu,Val/7.1	Lys/8.1; Ala,Leu/7.9; Val/7.6	Lys/8.4;Ala/7.9; Glu,Leu /7.1	Lys/8.6;Ala/8.1; Glu,Leu /7.1	Lys/8.4;Ala/7.9;Glu, Leu ,Ile/7.1	Ala/9.2;Lys/8.1; Leu/7.6	Leu/7.9;Lys,Ser,T hr/7.6;Glu/7.3	Ala/11;Leu/8.5;Glu/8.2