

Sets	Descriptor-sets	No. of descriptor s (properties)	No. of components	Type	Physicochemical properties
D1	Amino acid composition	1	20	Sequence composition	Hydrophobicity scale, average flexibility index, polarizability parameter, free energy of amino acid solution in water, residue accessible surface area, amino acid residue volume, steric parameters, relative mutability
D2	Dipeptide composition	1	400	Sequence composition	
D3	Normalized Moreau – Broto autocorrelation	8	240	Correlation of physicochemical properties	
D4	Moran autocorrelation	8	240	Correlation of physicochemical properties	Hydrophobicity scale, average flexibility index, polarizability parameter, free energy of amino acid solution in water, residue accessible surface area, amino acid residue volume, steric parameters, relative mutability
D5	Geary autocorrelation	8	240	Square correlation of physicochemical properties	Hydrophobicity scale, average flexibility index, polarizability parameter, free energy of amino acid solution in water, residue accessible surface area, amino acid residue volume, steric parameters, relative mutability
D6	Descriptors of composition, transition and distribution	21	147	Distribution and variation of physicochemical properties	Hydrophobicity, Van der Waals volume, polarity, polarizability, charge, secondary structures, solvent accessibility
D7	Quasi sequence order	4	160	Combination of sequence composition and correlation of physicochemical	Hydrophobicity, hydrophilicity, polarity, side-chain volume
D8	Pseudo amino acid composition	3	298	Combination of sequence composition and square correlation of physicochemical	Hydrophobicity, hydrophilicity, side chain mass
D9	Combination of amino acid and dipeptide composition	2	420	Combination of sequence compositions	
D10	Combination of all eight sets of descriptors	54	1745	Combination of all sets	