

Table 1 Protein characterization of AtCATs and ZmCATs

Gene	Gene ID	ORF Length (bp)	Length (aa)	Molecular formula	Molecular weight (kDa)	Isoelectric point	Hydrophilic relationship	Subcellular localization
<i>AtCAT1</i>	AT1G20630.1	2023	492	C ₂₅₅₇ H ₃₈₅₈ N ₇₂₂ O ₇₂₃ S ₁₅	56.762	6.95	-0.559	cytoplasm; nucleus; mitochondria
<i>AtCAT2</i>	AT4G35090.1	1930	492	C ₂₅₆₆ H ₃₈₇₃ N ₇₁₅ O ₇₃₀ S ₁₆	56.931	6.63	-0.574	chloroplast; cytoplasm; mitochondria
<i>AtCAT3</i>	AT1G20620.1	1901	492	C ₂₅₆₃ H ₃₈₉₇ N ₇₀₇ O ₇₂₅ S ₁₅	56.695	7.31	-0.482	cytoplasm; mitochondria
<i>ZmCAT1</i>	GRMZM2G090568	1628	531	C ₂₇₁₉ H ₄₁₂₈ N ₇₇₈ O ₇₈₂ S ₁₇	60.7	6.45	-0.506	chloroplast; mitochondria
<i>ZmCAT2</i>	GRMZM2G079348	2469	704	C ₃₅₆₄ H ₅₄₆₃ N ₁₀₄₃ O ₉₈₀ S ₂₇	79.467	9.33	-0.454	nucleus; mitochondri; cytoplasm
<i>ZmCAT3</i>	GRMZM2G088212	2178	492	C ₂₅₅₂ H ₃₈₆₀ N ₇₂₀ O ₇₁₈ S ₂₀	56.7563	6.96	-0.515	chloroplast; mitochondria