

Enzyme	E. C	Abbreviation	Substrate	Function
Peroxidase	1.11.1.7	PER	L-DOPA	Oxidizes lignin and aromatic compounds using H ₂ O ₂ or secondary oxidants as an electron acceptor (Sinsabaugh, 2010).
Phenol oxidase	1.10.3.2	PPO	L-DOPA	Oxidizes phenolic compounds using oxygen as an electron acceptor (Sinsabaugh, 2010).
α -1,4-glucosidase	3.2.1.20	α G	4-MUB- α -D-glucoside	Releases glucose from starch (Stone et al., 2014).
β -1,4-glucosidase	3.2.1.21	β G	4-MUB- β -D-glucoside	Releases glucose from cellulose (Stone et al., 2014).
β -1,4-xylosidase	3.2.1.37	β X	4-MUB- β -D-xyloside	Releases xylose from hemicellulose (Stone et al., 2014).
β - 1, 4-N-acetylglucosaminidase	3.2.1.14	NAG	4-MUB-N-acetyl- β -D-glucosaminide	Releases N-acetyl glucosamine from oligosaccharides (Stone et al., 2014).
Acid phosphatase	3.1.3.1	AP	4-MUB-phosphate	Releases phosphate groups (Stone et al., 2014).