

Laccase U

Benzenediol: oxygen oxidoreductase
EC 1.10.3.2

Description:	Enzyme preparation which oxidises monovalent and polyvalent phenolic compounds. It catalyses the reaction to humic like substances under less oxygenic conditions. Particularly Laccase U active and oxidises mono-phenols into the corresponding chinones and phenoxylradicals which polymerises spontaneously with precipitation in the solution at less oxygenic content. Laccase U has high residual activity at neutral pH .		
Origin:	<i>Classified</i>		
Application:	<ul style="list-style-type: none">• precipitation of phenolic substances• enzymatic browning of food (cacao, coffee)• glueing of flake boards• modification of elasticity and consistency of pastes, gums dispersion media, phenolic resins• production of microbiocides• analysis of phenols		
Activity:	> 1 000 U/g Substrate: Syringaldazin (Method: ASA Spezialenzyme GmbH, pH 5,0; 30°C)		
Substratespezifity:	Laccase U converts phenolic and halogenated substrates.		
Parameters of reaction:	<u>pH</u>	optimum 5-6	active within pH 4.5 – 7.0
	<u>Temperature</u>	optimum 40-45°C	active within 15 – 60°C
Order-No.:	2045		
Form of delivery:	brown powder		
Storage:	at -20°C		

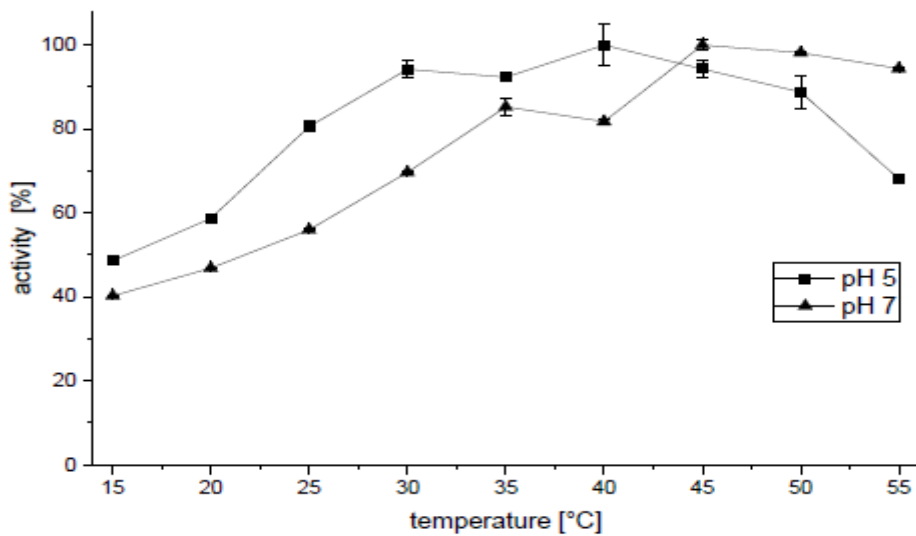


Figure 1: Temperature dependence of Laccase activity

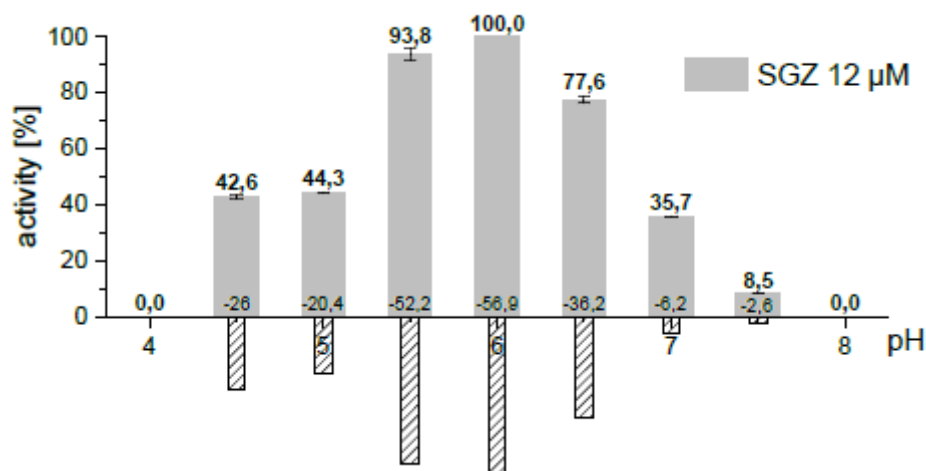


Figure 2: pH dependence of Laccase activity

Literature: Ming-Qiang Ai, (2015), J. Microbiol. Biotechnol., 25(8), 1361-1370