

Laccase U

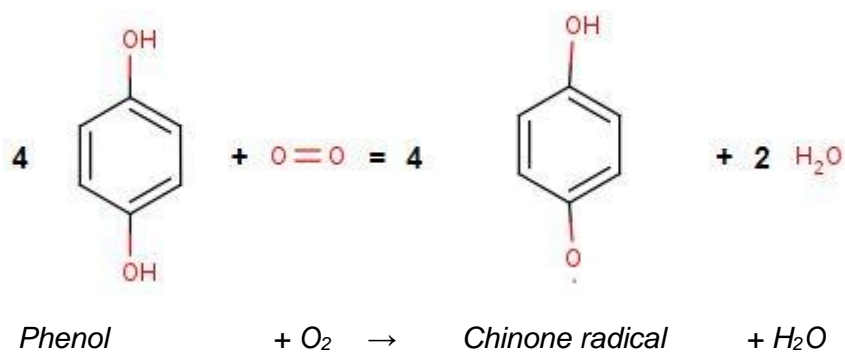
Benzenediol: oxygen oxidoreductase, E.C. 1.10.3.2

Description:

Enzyme preparation which oxidised monovalent and polyvalent phenolic compounds. It catalyses reactions to products similar like humic substances under less oxygenic conditions. Basically, Laccase oxidises ortho- and para-diphenols into the corresponding quinones and phenoxy radicals which polymerises spontaneously and are precipitated in the solution.

Laccase U has high residual activities at neutral pH and low temperatures.

Catalysed reaction:



Origin:

Classified (non GMO)

Application:

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

Analysis of phenols

Activity:

> 1 000 U/ g
(Substrate: Syringaldazin)

Specific activity:

> 50 U/ mg Protein

Parameter: pH Optimum: 5.5 - 6, effective in the range of pH 4.5 - 7
Temperature Optimum: 40 - 45°C, effective in the range of 15 - 60°C

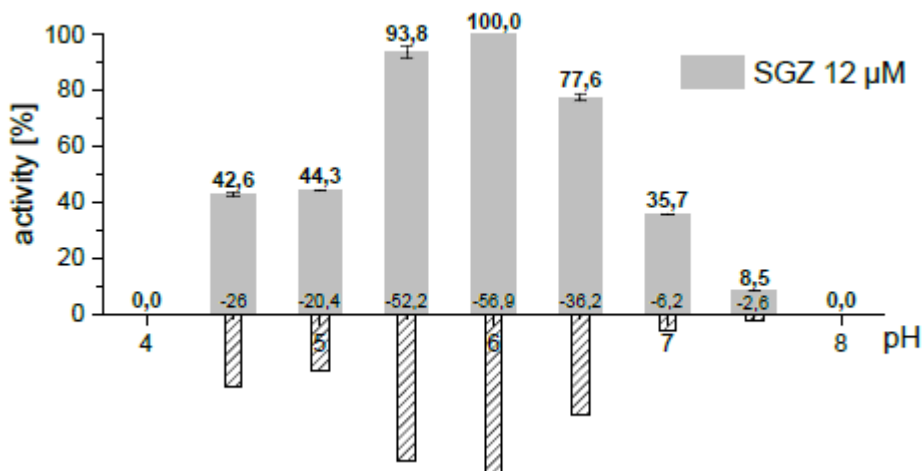


Image 1: pH-spectrum

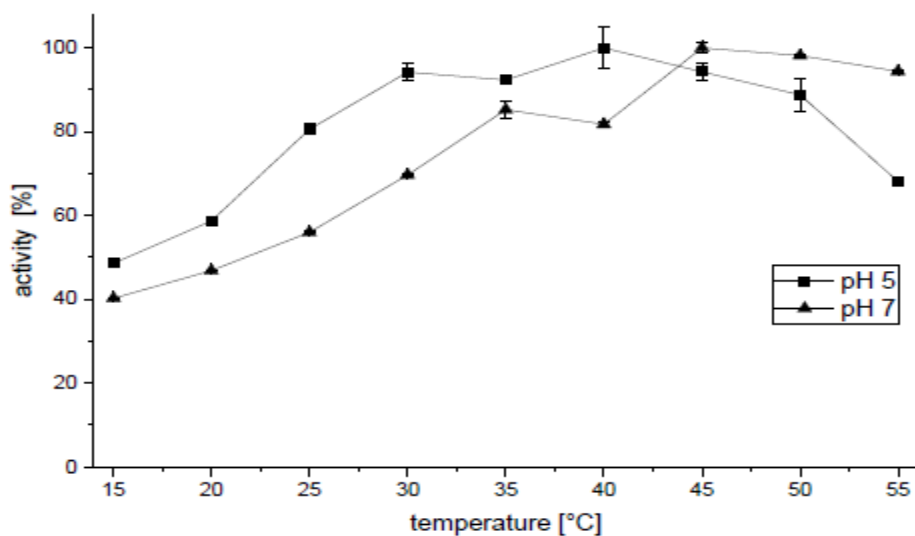


Image 2: Temperature-spectrum

Article-no.: 2045

Form of delivery: Dark brown powder/ lyophilizate

Stability: Stable at 4 – 6 °C, temperatures down to -20°C are possible

Storage: at 4 – 6°C, storage down to – 20°C is possible

Literature: [1] Wood, D.A., (1979), J. Gen. Microbiol., 117, 327-338
[2] Ming-Qiang Ai, (2015), J. Microbiol. Biotechnol., 25(8), 1361-1370