

Certificate of Analysis

Galactose Oxidase (GAO, D-Galactose Oxygen-6-oxidoreductase)

EC=1.1.3.9; *Dactylium dendroides*

Molecular Biology Grade

Catalog No	CAS No	Molecular Formula	Molecular Weight	Storage
MBS653678	9028-79-9		~68kD	-20°C
Lot No	Control No	Revision No	Revised By	Approved By
L16050425	C16050425	072215		

Galactose oxidase (GAO) produced by the fungus *Dactylium dendroides* is used in the quantitative determination of galactose in blood and other biological fluids. Because GAO oxidizes galactose even in polysaccharides it has been used to locate galactose histochemically and to detect and distinguish glycoproteins.

Specifications:

Lot Analysis:

Source:

Dactylium dendroides

Form:

Supplied as a lyophilized powder from sodium phosphate and sucrose.

Reconstitution:

Reconstitute with sterile ddH₂O.

Activity:

≥30 units per dry weight

70u/mg dw

% Catalase:

As Reported

5.3%

mg/ml (A280):

As Reported

0.38

Unit Definition:

1 unit is a change in absorbance at 425nm of 1.0 per minute at 25°C, pH 6.0, in a coupled peroxidase/o-tolidine system, using galactose as a substrate.

Storage and Stability:

Lyophilized powder may be stored at -20°C. Stable for 6 months after receipt at -20°C. Reconstitute with sterile ddH₂O. Aliquot to avoid repeated freezing and thawing. Store at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

1. Aavigad, G., et al., J. Biol. Chem. **237**: 2736 (1962). 2. Amaral, D., et al., J. Biol. Chem. **238**: 2281-2284 (1963). 3. Amaral, D., Kelly-Falcoz, F. & Horecker, B.: Galactose Oxidase of Polyporus circinatus, Methods in Enzymology 9, W. Wood, Academic Press, NY, 87, 1966. 4. Avigad, G., et al., Biochem. Biophys. Res. Commun. **4**: 474 (1961). 5. Avigad, G., Arch. Biochem. Biophys. **239**: 531 (1985). 6. Blumberg, W., et al., Biochim. Biophys. Acta **96**: 336 (1965). 7. Cleveland, L., et al., Biochem **14**: 1108 (1975). 8. Cooper, J., et al., J. Biol. Chem. **234**: 445 (1959).