Ornithine Decarboxylase, Human Recombinant

CATALOG NO: P1342-2 2 µg
P1342-10 10 µg

ALTERNATE NAMES: ODC

SOURCE: *E.coli*

PURITY: ≥ 95% by SDS-PAGE

MOL. WEIGHT: 51.1 kDa (1-481 aa) with N-terminal His-tag

FORM: Lyophilized

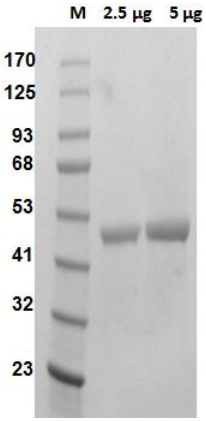
RECONSTITUTION: Reconstitute in 50% Glycerol with 5 mM DTT to generate 1 mg/ml of Ornithine Decarboxylase, and incubate at 25 °C for 30 minutes.

STORAGE CONDITIONS: Store lyophilized and reconstituted protein at 4 °C.

DESCRIPTION Ornithine Decarboxylase is a Pyridoxal Phosphate-dependent amino acid deacarboxylase, which catalyzes the conversion of Ornithine to Putrescine. It is the first and the rate-limiting step in the Polyamine Biosynthetic Pathway. Polyamines are involved in processes such as cell growth, differentiation, and synthesis of macromolecules. Overexpression of Ornithine Decarboxylase is known to play role in cancers and inflammation.

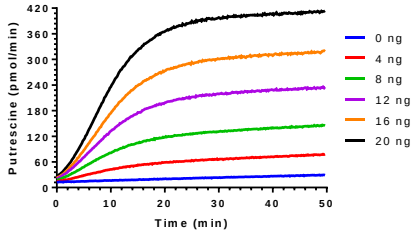
SPECIFIC ACTIVITY: Specific Activity is ≥ 1 U/mg. Specific Activity was determined using BioVision's Total Polyamine Assay Kit (Cat. No. K475).

UNIT DEFINITION: One unit of Ornithine Decarboxylase will catalyze the conversion of 1.0 µmole of Ornithine to Putrescine per minute at pH 7.6 and 37 °C.



SDS-PAGE (4-20%) of recombinant ODC: Recombinant protein loaded under reducing conditions and stained with Coomassie Blue. Lane M-MW marker, Lanes 2-3 ODC.

(A)



(B)

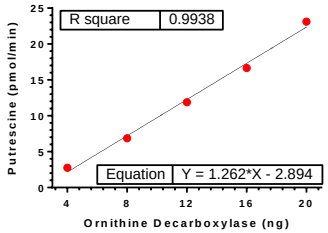


Fig A. Dose response kinetics of ODC with 2 mM Ornithine as the substrate. The amount of Putrescine generated per min as a function of Ornithine Decarboxylase was quantified using BioVision's Total Polyamine Assay Kit (Cat. No. 475). **Fig B.** The specific activity of BioVision's Ornithine Decarboxylase is ≥ 1 U/mg as assayed using BioVision's Total Polyamine Assay Kit (Cat. No. K475)

Related Products:

- Total Polyamine Assay Kit (Fluorometric) **(Cat. No. K475)**
- Methionine Assay Kit (Fluorometric) **(Cat. No. K442)**
- Diamine Oxidase Activity Assay Kit (Fluorometric) **(Cat. No. K496)**
- Human Recombinant Beta-Enolase **(Cat. No. 6364)**

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