

Oxalate Decarboxylase, Active Bacterial recombinant protein YvrK Catalog # PBV10887r

Specification

Oxalate Decarboxylase, Active Bacterial recombinant protein - Product info

Primary Accession	<u>034714</u>
Concentration	2
Calculated MW	45.9 kDa (384 aa + NT 6xHis-tag) KDa

Oxalate Decarboxylase, Active Bacterial recombinant protein - Additional Info

Gene ID Gene Symbol Other Names YvrK	938620 OxdC
Gene Source Source Assay&Purity Assay2&Purity2 Recombinant Target/Specificity Oxalate decarboxylase	Bacillus Subtilis E. coli SDS-PAGE; ≥98% N/A; Yes

Format Liquid

Storage -80°C; 2 mg/mL solution in 20 mM Tris, pH 8 containing 20% glycerol.

Oxalate Decarboxylase, Active Bacterial recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Oxalate Decarboxylase, Active Bacterial recombinant protein - Images

Oxalate Decarboxylase, Active Bacterial recombinant protein - Background

Oxalate decarboxylase (OxdC, EC4.1.1.2) is a manganese-containing enzyme, which decomposes



oxalic acid and oxalate. With OxdC catalysis, oxalate is split into formate and CO2. This enzyme belongs to the family of lyases, specifically the carboxy-lyases, which cleave carbon-carbon bonds. The systematic name of this enzyme class is oxalate carboxy-lyase (formate-forming). This enzyme is also called oxalate carboxy-lyase. The enzyme is composed of two cupin domains, each of which contains a Mn (II) ion. This enzyme participates in glyoxylate and dicarboxylate metabolism. This enzyme has been recognized for diagnostics in diverse biotechnological applications such as the clinical assay of oxalate in blood and urine, therapeutics, process industry, and agriculture to lower oxalate levels in foods and the environment. The recombinant protein made from the Bacillus Subtilis sequence includes OxdC with N-terminal His-tag.

Oxalate Decarboxylase, Active Bacterial recombinant protein - References

Wipat A., et al. Microbiology 144:1593-1600(1998). Kunst F., et al. Nature 390:249-256(1997). Tanner A., et al.J. Bacteriol. 182:5271-5273(2000). Tanner A., et al.J. Biol. Chem. 276:43627-43634(2001). MacLellan S.R., et al. Mol. Microbiol. 69:954-967(2008).