

Product datasheet

Recombinant human PHGDH/Malate dehydrogenase protein ab198455

[1 References](#) [2 Images](#)

Description

Product name	Recombinant human PHGDH/Malate dehydrogenase protein
Biological activity	Specific Activity: ≥80 pmol/min/μg Assay Conditions: The reaction mixture contained 100 mM Tris-HCl, pH 8.8, 400 mM NaCl ₂ , 0.2 mM DTT, 2.5 mM 3-phospho-D-glyceric acid, 1 mM NAD, and various amount of ab198455 in a final volume of 50 μL. Reactions were initiated with the addition of ab198455, and the increase in NADH fluorescence (Ex340/Em460 nm) was continuously monitored for 10 min at room temperature.
Purity	> 80 % SDS-PAGE.
Expression system	Escherichia coli
Accession	<u>O43175</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MAFANLRKVLISDSLDPCCRKILQDGGGLQVVEKQNLKKEE LIAELQDCEG LVRSA TKVTADVINA AEKLQVVGRAGTGVDNVDLEAATR KGILVMNTPN GNSLSAAELTCGMIMCLARQIPQATASMKGKWERKKFM GTELANGKTLGI LGLGRIGREVATRMQSFGMKTIGYDPIISPEVSASFVQQL PLEEWPLC DFITVHTPLLPSTTGLLNDNTFAQCKKGVRV VNCARGGMD EGALLRALQ SGQCAGAALDVFTEEPPRDRALVDHENVISCPHLGASTK EAQSRCGEEIA VQFVDMVKGKSLTGVVNAQALTSASFPHTKPWIGLAEAL GTLMRAWAGSP KGTIQVITQGTSLKNAGNCLSPAVIVGLLKEASKQADVNLV NAKLLVKEA GLNVTTSHSPAAPGEQGFGECLLAVALAGAPYQAVGLVQ

GTTPVLQGLNG
AVFRPEVPLRRDLPLLLFRTQTSDPAMLPTMIGLLAEAGV
RLLSYQTSLV
SDGETWHVMGISSLLPSLEAWKQHVTEAFQFHFHHHHHH

Predicted molecular weight	58 kDa including tags
Amino acids	1 to 533
Tags	His tag C-Terminus
Additional sequence information	GenBank Accession No. NM_006623

Specifications

Our **Abpromise guarantee** covers the use of **ab198455** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid
Additional notes	This product was previously labelled as PHGDH

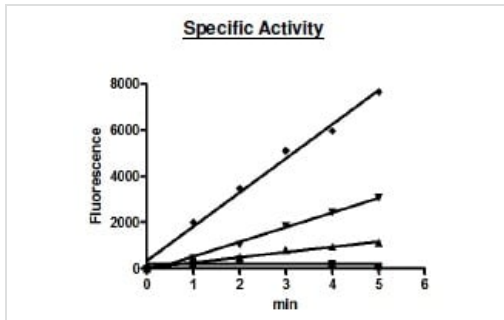
Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Preservative: 1.16% Imidazole Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 0.04% Tween, 20% Glycerol (glycerin, glycerine) This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

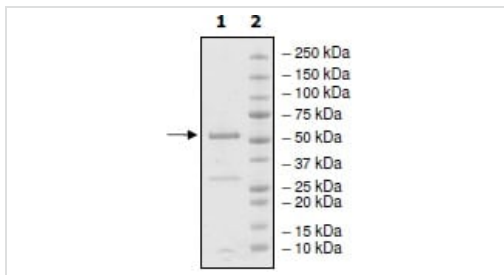
Pathway	Amino-acid biosynthesis; L-serine biosynthesis; L-serine from 3-phospho-D-glycerate: step 1/3.
Involvement in disease	Defects in PHGDH are the cause of phosphoglycerate dehydrogenase deficiency (PHGDH deficiency) [MIM:601815]. It is characterized by congenital microcephaly, psychomotor retardation, and seizures.
Sequence similarities	Belongs to the D-isomer specific 2-hydroxyacid dehydrogenase family.

Images



Specific activity of ab198455.

Functional Studies - Recombinant human
PHGDH/Malate dehydrogenase protein (ab198455)



4-20% SDS-PAGE analysis of ab198455 with Coomassie staining.

Lane 1: 5.5 µg ab198455

Lane 2: Protein marker

SDS-PAGE - Recombinant human PHGDH/Malate
dehydrogenase protein (ab198455)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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