

## Human DHODH protein, His tag

Cat. No. GTX00200-pro

**Applications** Functional Assay**Species** Human**Package**

10 µg

## Applications

## Application Note

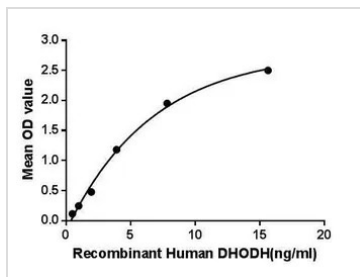
Dihydroorotate dehydrogenase (DHODH) is an enzyme which catalyzes the fourth enzymatic step, the ubiquinone-mediated oxidation of dihydroorotate to orotate, in de novo pyrimidine biosynthesis. This protein is a mitochondrial protein located on the outer surface of the inner mitochondrial membrane. As an enzyme associated with the electron transport chain, DHODH could link mitochondrial bioenergetics, cell proliferation, ROS production, and apoptosis in certain cell types. DHODH depletion also resulted in increased ROS production, decreased membrane potential and cell growth retardation. Besides, FK506 Binding Protein 8 (FKBP8) has been identified as an interactor of DHODH, thus a binding ELISA assay was conducted to detect the interaction of recombinant human DHODH and recombinant human FKBP8. Briefly, DHODH were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to FKBP8-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti- DHODH pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of DHODH and FKBP8 was in a dose dependent manner.

**Observed MW (kDa)** 42 kDa.

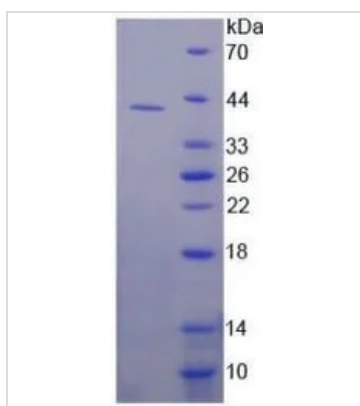
## Properties

**Form** Lyophilized powder**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.**Preservative** ProClin 300**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.**Region/Sequence** N-terminal His-Tag; Arg35~Asp392 (NP\_001352.2)**Expression System** E. coli**Purity** > 90%**Endotoxin** < 1 EU/µg**Conjugation** Unconjugated**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

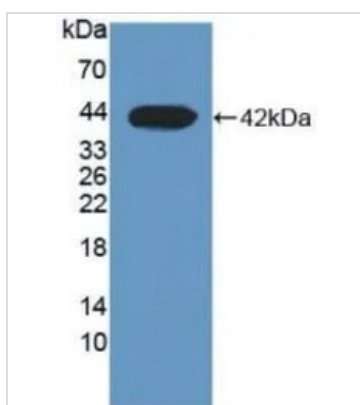
For full product information, images and publications, please visit our [website](#).

**DATA IMAGES**

**GTX00200-pro Functional Assay Image**

Functional ELISA analysis of GTX00200-pro Human DHODH protein which can bind immobilized FKBP8 protein.


**GTX00200-pro Image**

SDS-PAGE analysis of GTX00200-pro Human DHODH protein.


**GTX00200-pro Image**

WB analysis of GTX00200-pro Human DHODH protein.



For full product information, images and publications, please visit our [website](https://www.genetex.com).