

Mouse anti-Human HGD Monoclonal Antibody | anti-HGD antibody

Anti-HGD Antibody Picoband (monoclonal, 2F11E1)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126903	Mouse	Human	Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

HGD; Monoclonal Antibody; Anti-HGD Antibody Picoband (monoclonal; 2F11E1); anti-HGD antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	2F11E1
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-HGD antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E coli-derived human HGD recombinant protein (Position: D374-N445).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of CACO-2 cells using anti-HGD antibody (AAA126903). Overlay histogram showing CACO-2 cells stained with AAA126903 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-HGD Antibody (AAA126903, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of HGD using anti-HGD antibody (AAA126903). HGD was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml mouse anti-HGD Antibody (AAA126903) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of HGD using anti-HGD antibody (AAA126903). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HCCP tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-HGD antigen affinity purified monoclonal antibody (#AAA126903) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HGD at approximately 50 kDa. The expected band size for HGD is at 50 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-HGD antibody	The HGD gene encodes homogentisate 1,2-dioxygenase (HGD), an enzyme involved in the catabolism of phenylalanine and tyrosine. This enzyme is involved in the catabolism of the amino acids tyrosine and phenylalanine. Mutations in this gene are the cause of the autosomal recessive metabolism disorder alkaptonuria. This gene is mapped to chromosome 3q21-q23 by a preliminary PCR screen of hamster/human somatic cell hybrid genomic DNA samples and by fluorescence in situ hybridization.
Product Categories/Family for anti-HGD antibody	Primary Antibodies, Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	115527117
NCBI GeneID	3081
NCBI Accession #	NP_000178.2
NCBI GenBank Nucleotide #	NM_000187.3
UniProt Accession #	Q93099; A8K417; B2R8Z0
Molecular Weight	49,964 Da
NCBI Official Full Name	homogentisate 1,2-dioxygenase
NCBI Official Synonym Full Names	homogentisate 1,2-dioxygenase
NCBI Official Symbol	HGD
NCBI Official Synonym Symbols	AKU; HGO
NCBI Protein Information	homogentisate 1,2-dioxygenase; homogentisicase; homogentisate oxidase; homogentisate oxygenase; homogentisic acid oxidase
UniProt Protein Name	Homogentisate 1,2-dioxygenase
UniProt Gene Name	HGD
UniProt Synonym Gene Names	HGO
UniProt Entry Name	HGD_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.