

HGD Rabbit pAb

HGD Rabbit pAb Catalog # AP56013

Product Information

Application WB
Primary Accession Q93099
Reactivity Rat
Host Rabbit
Clonality Polyclonal
Calculated MW 49964
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human HGD

Epitope Specificity 351-445/445

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SIMILARITY Belongs to the homogentisate dioxygenase family.

DISEASE Alkaptonuria (AKU) [MIM:203500]: An autosomal recessive error of

metabolism characterized by an increase in the level of homogentisic acid. The clinical manifestations are urine that turns dark on standing and alkalinization, black ochronotic pigmentation of cartilage and collagenous tissues, and spine arthritis. Note=The disease is caused by mutations affecting

the gene represented in this entry.

Important NoteThis product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions HGD is a 445 amino acid protein that belongs to the homogentisate

dioxygenase family and is involved in the pathway of amino acid degradation. Expressed at high levels in kidney, colon, liver, prostate and small intestine, HGD uses iron as a cofactor to catalyze the oxygen-dependent conversion of homogentisate to 4-maleylacetoacetate, a reaction that is the fourth step in the creation of L-phenylalanine from fumarate and acetoacetic acid. Defects in the gene encoding HGD are the cause of alkaptonuria (AKU), an autosomal recessive disorder that is characterized by urine that turns dark on standing and alkalinization, black ochronotic pigmentation of cartilage and collagenous

tissues and spine arthritis.

Additional Information

Gene ID 3081

Other Names Homogentisate 1, 2-dioxygenase, 1.13.11.5, Homogentisate oxygenase,

Homogentisic acid oxidase, Homogentisicase, HGD, HGO

Target/Specificity Highest expression in the prostate, small intestine, colon, kidney and liver.

Dilution WB=1:500-2000

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name HGD

Synonyms HGO

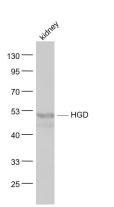
Function Catalyzes the conversion of homogentisate to maleylacetoacetate.

Tissue Location Highest expression in the prostate, small intestine, colon, kidney and liver

Background

HGD is a 445 amino acid protein that belongs to the homogentisate dioxygenase family and is involved in the pathway of amino acid degradation. Expressed at high levels in kidney, colon, liver, prostate and small intestine, HGD uses iron as a cofactor to catalyze the oxygen-dependent conversion of homogentisate to 4-maleylacetoacetate, a reaction that is the fourth step in the creation of L-phenylalanine from fumarate and acetoacetic acid. Defects in the gene encoding HGD are the cause of alkaptonuria (AKU), an autosomal recessive disorder that is characterized by urine that turns dark on standing and alkalinization, black ochronotic pigmentation of cartilage and collagenous tissues and spine arthritis.

Images



Sample:

Kidney (Mouse) Lysate at 40 ug

Primary: Anti- HGD (AP56013) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 50 kD Observed band size: 50 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.