10320 Camino Santa Fe, Suite G
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HGD Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56013

Specification

HGD Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q93099
Reactivity	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**50 KDa**
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 Note	**This 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.

HGD Polyclonal Antibody - 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~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

HGD Polyclonal Antibody - 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

HGD Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HGD Polyclonal Antibody - Images

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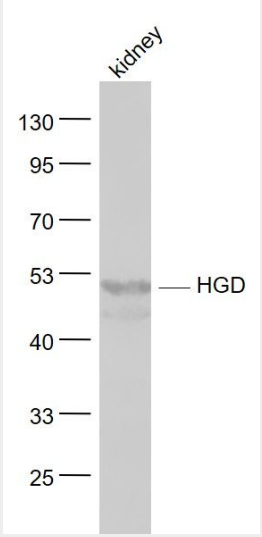

Sample:
Kidney (Mouse) Lysate at 40 ug
Primary: Anti- HGD (bs-15472R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 50 kD
Observed band size: 50 kD