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# HGD Rabbit pAb

HGD Rabbit pAb
Catalog # AP56013

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q93099 |
| **Reactivity** | Mouse |
| **Predicted** | Rat, Human, Rabbit |
| **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. |
| **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. |

## Additional Information

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| **Gene ID** | 3081 |
| **Other Names** | Homogentisate 1, 2-dioxygenase, 1.13.11.5, Homogentisate oxygenase, Homogentisic acid oxidase, Homogentisicase, HGD, HGO |
| **Dilution** | WB=1:500-2000 |

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| **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. |

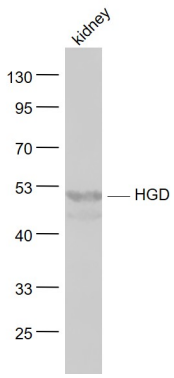
## Protein Information

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| **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 |

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## 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'.