10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HPD Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8591a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P32754
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17892
Calculated MW	44964
Antigen Region	92-121

Additional Information

Gene ID	3242
Other Names	4-hydroxyphenylpyruvate dioxygenase, 4-hydroxyphenylpyruvic acid oxidase, 4HPPD, HPD, HPPDase, HPD, PPD
Target/Specificity	This HPD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 92-121 amino acids from the N-terminal region of human HPD.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HPD Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HPD
Synonyms	PPD

Function	Catalyzes the conversion of 4-hydroxyphenylpyruvic acid to homogentisic acid, one of the steps in tyrosine catabolism (PubMed:10942115, PubMed:1339442, PubMed:34047349, PubMed:37794595). In addition may act as a N6-methyltransferase that methylates adenosine residues at the N(6) position of some RNAs (PubMed:10942115).
Cellular Location	Cytoplasm. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P32755}; Peripheral membrane protein {ECO:0000250|UniProtKB:P32755}. Golgi apparatus membrane {ECO:0000250|UniProtKB:P32755}; Peripheral membrane protein {ECO:0000250|UniProtKB:P32755}. Nucleus

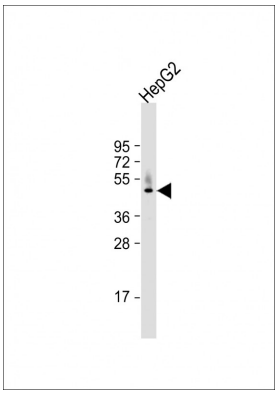
Background

HPD is an enzyme in the catabolic pathway of tyrosine. This protein catalyzes the conversion of 4-hydroxyphenylpyruvate to homogentisate.

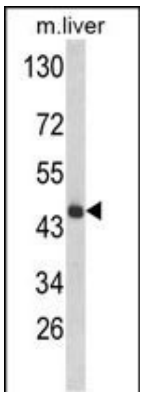
References

Item,C.B., et.al., Mol. Genet. Metab. 91 (4), 379-383 (2007)
Wistow,G., et.al., Mol. Vis. 8, 171-184 (2002)

Images

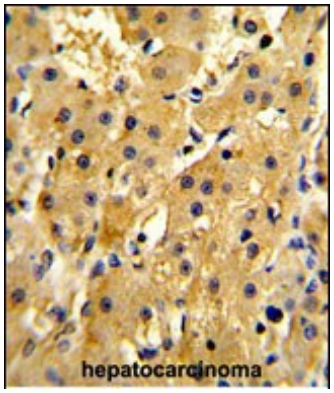


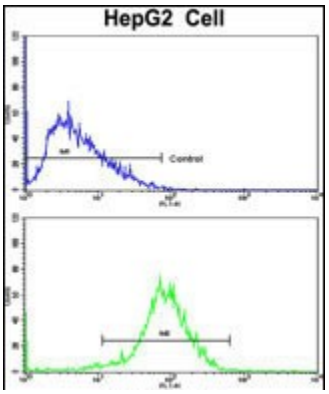
Anti-HPD Antibody (N-term) at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of HPD Antibody (N-term) (Cat. #AP8591a)in mouse liver tissue lysates (35ug/lane). HPD (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with HPD Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of HepG2 cells using HPD Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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