

Product datasheet

Anti-QDPR/DHPR antibody ab232983

4 Images

Overview

Product name	Anti-QDPR/DHPR antibody
Description	Rabbit polyclonal to QDPR/DHPR
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Rat, Human, Pig
Immunogen	<p>Recombinant full length protein (His-tag) corresponding to Human QDPR/DHPR aa 1-244. (Expressed in E.coli). Sequence:</p> <pre> MAAAAAAGEARRVLVYGGRGALGSRCVQAFRARNW WWASVDVVENEESA SIIVKMTDSFTEQADQVTAEVGKLLGEEKVDAILCVAG GWAGGNAKSKSL FKNCDLMWKQSIWTSTISSHLATKHLKEGGLLTLGAK AALDGTPGMIGY GMAKGAVHQLCQSLAGKNSGMPPGAAAIAVLPVTLDT PMNRKSMPEADFS SWTPLEFLVETFDWITGKNRPSSGSLIQVVTTEGRTE LTPAYF </pre> <p>Database link: P09417</p> <p style="text-align: right;">  Run BLAST with  Run BLAST with </p>
Positive control	IHC-P: Human cerebrum tissue. ICC/IF: HepG2 cells. WB: Recombinant human QDPR/DHPR protein; HepG2 cell lysate; Pig liver and brain lysate; Rat liver lysate.
General notes	Previously labelled as QDPR.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide

	Constituents: PBS, 50% Glycerol
Purity	Immunogen affinity purified
Purification notes	Antigen-specific affinity chromatography followed by Protein A affinity chromatography.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab232983** in the following tested applications.

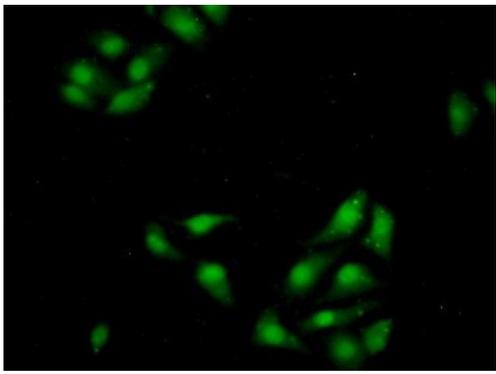
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/5 - 1/20.
IHC-P		Use a concentration of 5 - 20 µg/ml.
WB		Use a concentration of 0.5 - 2 µg/ml. Predicted molecular weight: 26 kDa.

Target

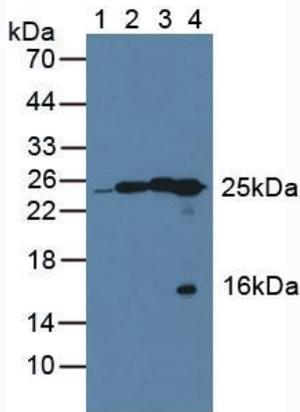
Function	The product of this enzyme, tetrahydrobiopterin (BH-4), is an essential cofactor for phenylalanine, tyrosine, and tryptophan hydroxylases.
Involvement in disease	Defects in QDPR are the cause of BH4-deficient hyperphenylalaninemia type C (HPABH4C) [MIM:261630]; also called dihydropteridine reductase deficiency (DHPR deficiency) or hyperphenylalaninemia tetrahydrobiopterin-deficient due to DHPR deficiency or quinoid dihydropteridine reductase deficiency (QDPR deficiency). HPABH4C is a rare autosomal recessive disorder characterized by hyperphenylalaninemia and severe neurologic symptoms (malignant hyperphenylalaninemia) including axial hypotonia and truncal hypertonia, abnormal thermogenesis, and microcephaly. These signs are attributable to depletion of the neurotransmitters dopamine and serotonin, whose syntheses are controlled by tryptophan and tyrosine hydroxylases that use BH-4 as cofactor. These patients do not respond to phenylalanine-restricted diet. HPABH4C is lethal if untreated.
Sequence similarities	Belongs to the short-chain dehydrogenases/reductases (SDR) family.

Images



Immunocytochemistry/ Immunofluorescence - Anti-QDPR/DHPR antibody (ab232983)

HepG2 (human liver hepatocellular carcinoma cell line) cells labelling QDPR/DHPR (green) using ab232983 at 20 ug/ml in ICC/IF. FITC staining.



Western blot - Anti-QDPR/DHPR antibody (ab232983)

All lanes : Anti-QDPR/DHPR antibody (ab232983) at 2 µg/ml

Lane 1 : HepG2 (human liver hepatocellular carcinoma cell line) cell lysate.

Lane 2 : Pig liver tissue lysate

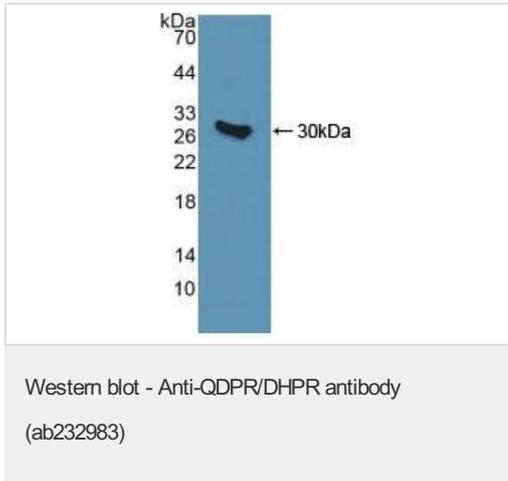
Lane 3 : Pig brain tissue lysate.

Lane 4 : Rat brain tissue lysate.

Secondary

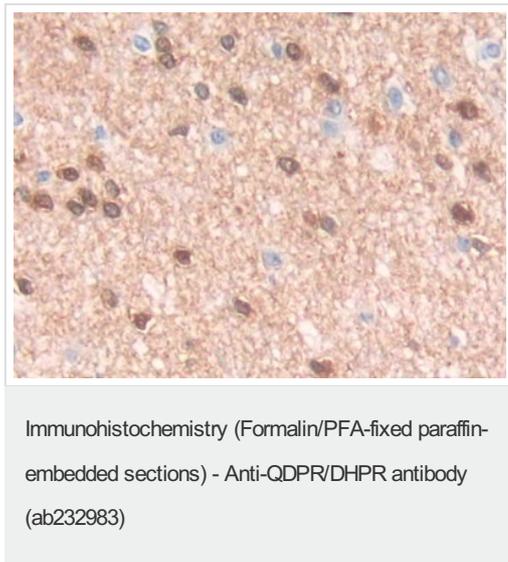
All lanes : HRP-Linked Guinea pig Anti-Rabbit Ab at 1/2000 dilution

Predicted band size: 26 kDa



Anti-QDPR/DHPR antibody (ab232983) at 2 µg/ml + Recombinant human QDPR/DHPR protein.

Predicted band size: 26 kDa



Formalin-fixed, paraffin-embedded human cerebrum tissue stained for QDPR/DHPR using ab232983 at 20ug/ml in immunohistochemical analysis. DAB staining.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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