

Datasheet for ABIN1704261
anti-CYB5R3 antibody (Cy5)



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Overview

Quantity:	100 µL
Target:	CYB5R3
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CYB5R3 antibody is conjugated to Cy5
Application:	Western Blotting (WB)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human CYB5R3
Isotype:	IgG
Cross-Reactivity:	Mouse
Predicted Reactivity:	Human,Rat,Dog,Cow,Sheep,Pig,Horse,Chicken
Purification:	Purified by Protein A.

Target Details

Target:	CYB5R3
Alternative Name:	Cyb5r3 (CYB5R3 Products)
Background:	Synonyms: B5R, Cyb5r3, Cytochrome b5 reductase 3, Cytochrome b5 reductase, DIA1, Diaphorase 1, Diaphorase-1, NADH cytochrome b5 reductase 3, NADH-cytochrome b5

Target Details

reductase 3 membrane-bound form, NADH-cytochrome b5 reductase 3 soluble form, NB5R3_HUMAN, OTTHUMP00000028761, OTTHUMP00000198435, OTTHUMP00000198574, OTTHUMP00000198662, OTTHUMP00000198665.

Background: CYB5R3 is a 301 amino acid protein encoded by the human gene CYB5R3. CYB5R3 belongs to the flavoprotein pyridine nucleotide cytochrome reductase family and has two naturally occurring isoforms. Isoform 1 is anchored to the cytoplasmic side of the endoplasmic reticulum membrane and mitochondrion outer membrane, while isoform 2 is the soluble form found in erythrocytes. CYB5R3 is involved in the desaturation and elongation of fatty acids, cholesterol biosynthesis, drug metabolism and, in erythrocytes, methemoglobin reduction. A serine residue at position 117 seems to only be found in persons of African origin. The allele frequency is 0.23 in African Americans. It is not found in Caucasians, Asians, Indo-Aryans or Arabs. This difference seems to have no effect on the enzyme activity. Defects in CYB5R3 are the cause of hereditary methemoglobinemia (HM). There are three forms of this disease: type 1 (HM1), in which the enzyme is only deficient in erythrocytes with a mild cyanosis, type 2 (HM2), in which the enzyme is completely deficient, and type 3 (HM3), where the deficiency is seen in all blood cells. Type 2 is a severe form accompanied by mental retardation and neurological impairment.

Gene ID:	1727
Pathways:	SARS-CoV-2 Protein Interactome

Application Details

Application Notes:	IF(IHC-P) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Handling

Storage:	-20 °C
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Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
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Expiry Date:	12 months
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