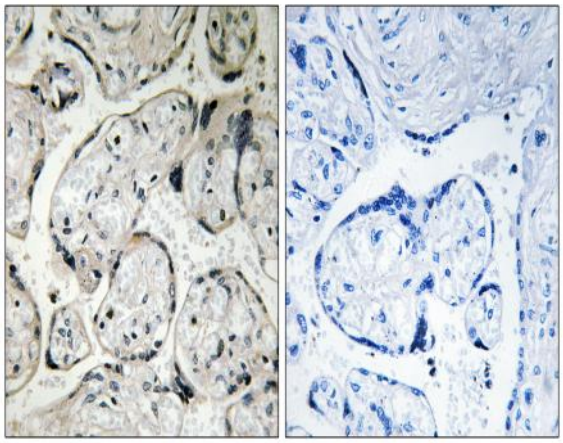
Best Tools for immunology Research

CYB5R3 Polyclonal Antibody

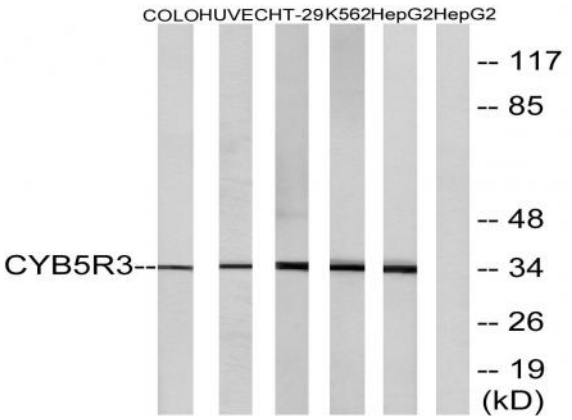
Catalog No :	YT1166
Reactivity :	Human;Rat;Mouse;
Applications :	WB;IHC;IF;ELISA
Target :	CYB5R3
Fields :	>>Amino sugar and nucleotide sugar metabolism
Gene Name :	CYB5R3
Protein Name :	NADH-cytochrome b5 reductase 3
Human Gene Id :	1727
Human Swiss Prot No :	P00387
Mouse Swiss Prot No :	Q9DCN2
Immunogen :	The antiserum was produced against synthesized peptide derived from human CYB5R3. AA range:137-186
Specificity :	CYB5R3 Polyclonal Antibody detects endogenous levels of CYB5R3 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band :	34kD
Cell Pathway :	Amino sugar and nucleotide sugar metabolism;
Background :	This gene encodes cytochrome b5 reductase, which includes a membrane-bound form in somatic cells (anchored in the endoplasmic reticulum, mitochondrial and other membranes) and a soluble form in erythrocytes. The membrane-bound form exists mainly on the cytoplasmic side of the endoplasmic reticulum and functions in desaturation and elongation of fatty acids, in cholesterol biosynthesis, and in drug metabolism. The erythrocyte form is located in a soluble fraction of circulating erythrocytes and is involved in methemoglobin reduction. The membrane-bound form has both membrane-binding and catalytic domains, while the soluble form has only the catalytic domain. Alternate splicing results in multiple transcript variants. Mutations in this gene cause methemoglobinemias. [provided by RefSeq, Jan 2010],
Function :	catalytic activity:NADH + 2 ferricytochrome b5 = NAD(+) + H(+) + 2 ferrocytochrome b5.,cofactor:FAD.,disease:Defects in CYB5R3 are the cause of hereditary methemoglobinemia (HM) [MIM:250800]. 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; type 3 (HM3) where the deficiency is seen in all blood cells. Type 2 is a severe form accompanied with mental retardation and neurological impairment.,function:Desaturation and elongation of fatty acids, cholesterol biosynthesis, drug metabolism, and, in erythrocyte, methemoglobin reduction.,polymorphism:Ser-117 seems to only be found in persons of African origin. The allele frequency is 0.23 in African Americans. It was not found in Caucasians, Asians, Indo-Aryans, or Arabs. There seems to be no effect on the enzym
Subcellular Location :	[Isoform 1]: Endoplasmic reticulum membrane; Lipid-anchor; Cytoplasmic side. Mitochondrion outer membrane; Lipid-anchor; Cytoplasmic side.; [Isoform 2]: Cytoplasm. Produces the soluble form found in erythrocytes.
Expression :	Isoform 2 is expressed at late stages of erythroid maturation.
Sort :	4700
No4 :	1
Host :	Rabbit
Modifications :	Unmodified

Products Images



Immunohistochemistry analysis of paraffin-embedded human placenta tissue, using CYB5R3 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2, COLO, HUVEC, HT-29, and K562 cells, using CYB5R3 Antibody. The lane on the right is blocked with the synthesized peptide.