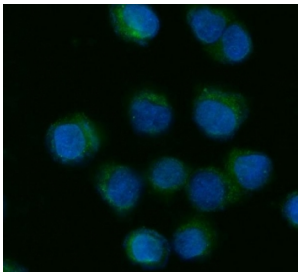
CYP7A1 Antibody (RQ5717)

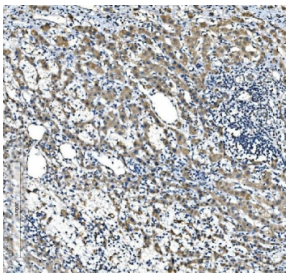
Catalog No.	Formulation	Size
RQ5717	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

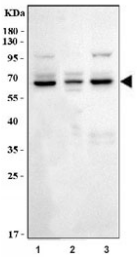
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P22680
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Flow cytometry: 1-3ug/million cells Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This CYP7A1 antibody is available for research use only.



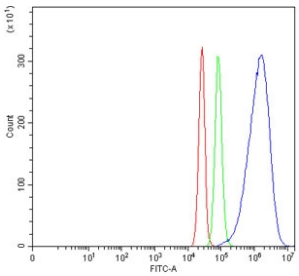
Immunofluorescent staining of FFPE human SiHa cells with CYP7A1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC staining of FFPE human liver cancer tissue with CYP7A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) HCCT, 2) HepG2 and 3) HL-60 cell lysate with CYP7A1 antibody. Predicted molecular weight ~54 kDa.



Flow cytometry testing of human SiHa cells with CYP7A1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CYP7A1 antibody.

Description

CYP7A1 (Cytochrome P450 Subfamily VIIA Polypeptide 1), also called CYP7 or CHOLESTEROL 7-ALPHA-HYDROXYLASE, is an enzyme that in humans is encoded by the CYP7A1 gene. Using both mouse-human somatic cell hybrids and in situ chromosomal hybridization, Cohen et al.(1992) mapped the CYP7 gene to 8q11-q12. By transfection of reporter constructs, mutation analysis, and DNase footprinting, Molowa et al.(1992) identified areas of the CYP7A1 promoter region that showed hepatocyte-specific activation. They found HNF3 to be an activator of CYP7A1 activity. Agellon et al.(2002) found that wildtype mice and mice transgenic for human CYP7A1 respond differently to cholesterol feeding. Cholesterol feeding stimulated Cyp7a1 mRNA abundance and enzymatic activity in wildtype mice, but repressed human CYP7A1 mRNA and activity in transgenic mice.

Application Notes

Optimal dilution of the CYP7A1 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids I10-L504) was used as the immunogen for the CYP7A1 antibody.

Storage

After reconstitution, the CYP7A1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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