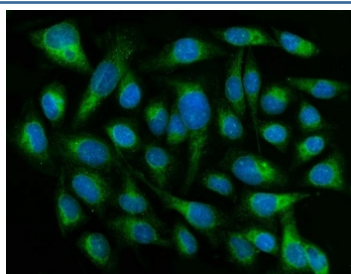


## CYB5R3 Antibody (RQ6610)

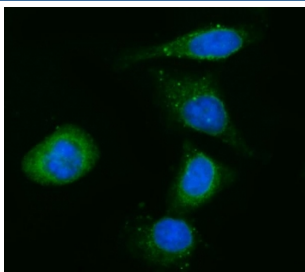
| Catalog No. | Formulation   | Size   |
|-------------|---|--------|
| RQ6610      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

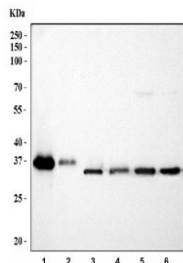
|                           |  |
|---------------------------|--|
| <b>Availability</b>       | 1-3 business days  |
| <b>Species Reactivity</b> | Human, Mouse, Rat  |
| <b>Format</b>             | Antigen affinity purified  |
| <b>Host</b>               | Rabbit   |
| <b>Clonality</b>          | Polyclonal (rabbit origin)   |
| <b>Isotype</b>            | Rabbit IgG   |
| <b>Purity</b>             | Antigen affinity purified  |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose  |
| <b>UniProt</b>            | P00387   |
| <b>Localization</b>       | Cytoplasmic  |
| <b>Applications</b>       | Western Blot : 1-2ug/ml<br>Immunofluorescence (FFPE) : 5ug/ml<br>Flow Cytometry : 1-3ug/million cells<br>Direct ELISA : 0.1-0.5ug/ml |
| <b>Limitations</b>        | This CYB5R3 antibody is available for research use only.   |



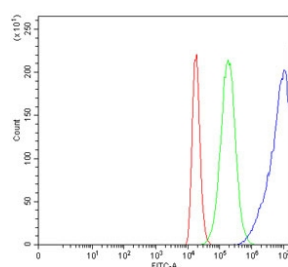
Immunofluorescent staining of FFPE human U-2 OS cells with CYB5R3 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Immunofluorescent staining of FFPE human Hep3B cells with CYB5R3 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HepG2, 2) human A431, 3) rat liver, 4) rat lung, 5) mouse liver and 6) mouse lung tissue lysate with CYB5R3 antibody. Predicted molecular weight: 32-38 kDa (multiple isoforms).



Flow cytometry testing of human 293T cells with CYB5R3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CYB5R3 antibody.

## Description

NADH-cytochrome b5 reductase 3 is an enzyme that in humans is encoded by the CYB5R3 gene. 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.

## Application Notes

Optimal dilution of the CYB5R3 antibody should be determined by the researcher.

## Immunogen

Recombinant human protein (amino acids M24-F301) was used as the immunogen for the CYB5R3 antibody.

## Storage

After reconstitution, the CYB5R3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

