

Datasheet for ABIN5000786

**anti-CYB5R3 antibody (AbBy Fluor® 680)**[Go to Product page](#)

## Overview

|              |                                                       |
|--------------|-------------------------------------------------------|
| Quantity:    | 100 µL                                                |
| Target:      | CYB5R3                                                |
| Reactivity:  | Human, Mouse, Rat                                     |
| Host:        | Rabbit                                                |
| Clonality:   | Polyclonal                                            |
| Conjugate:   | This CYB5R3 antibody is conjugated to AbBy Fluor® 680 |
| 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 ( <a href="#">CYB5R3 Products</a> )                                                                                                                      |
| 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: | <a href="#">SARS-CoV-2 Protein Interactome</a> |

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