

CYB5D2 (D-12): sc-136637

BACKGROUND

Cytochrome b5 is a membrane-bound heme protein that possesses two heme groups and functions as an electron carrier for many membrane-bound oxygenases. Two isoforms of cytochrome b5, a microsomal membrane-bound form and a cytoplasmic form, are produced by alternative splicing. Mutations in the gene encoding cytochrome b5 are associated with Leber's hereditary optic neuropathy and myopathy. CYB5D2 (cytochrome b5 domain containing 2) is a 264 amino acid single-pass membrane protein that contains one cytochrome b5 heme-binding domain, suggesting a similar function to cytochrome b5. The gene encoding CYB5D2 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CYB5D2 (human) mapping to 17p13.2; Cyb5d2 (mouse) mapping to 11 B4.

SOURCE

CYB5D2 (D-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CYB5D2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136637 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CYB5D2 (D-12) is recommended for detection of CYB5D2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with CYB5D1.

CYB5D2 (D-12) is also recommended for detection of CYB5D2 in additional species, including bovine.

Suitable for use as control antibody for CYB5D2 siRNA (h): sc-93765, CYB5D2 siRNA (m): sc-142651, CYB5D2 shRNA Plasmid (h): sc-93765-SH, CYB5D2 shRNA Plasmid (m): sc-142651-SH, CYB5D2 shRNA (h) Lentiviral Particles: sc-93765-V and CYB5D2 shRNA (m) Lentiviral Particles: sc-142651-V.

Molecular Weight of CYB5D2: 29 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.