

# CYBASC3 (C-14): sc-138231

## BACKGROUND

Cytochrome c is a well characterized mobile electron transport protein essential to energy conversion in all aerobic organisms. Cytochrome b associates with Cytochrome c and the Rieske protein to form complex III (also referred to as the Cytochrome bc(1) complex), which is involved in cellular respiration. Ascorbate-dependent (CYBASC) Cytochromes represent a family including Cytochrome b561 of animal chromaffin granules and Cytochrome b ascorbate dependent 3 (CYBASC3). Members of this family are found in most eukaryotic cells. CYBASC3 is a 242 amino acid protein that is highly expressed in the adrenal gland, spleen, and tonsil tissue.

## REFERENCES

1. Maruyama, K., et al. 1994. Oligo-capping: a simple method to replace the cap structure of eukaryotic mRNAs with oligoribonucleotides. *Gene* 138: 171-174.
2. Suzuki, Y., et al. 1997. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. *Gene* 200: 149-156.
3. May, J.M., et al. 1999. Ascorbate-dependent electron transfer across the human erythrocyte membrane. *Biochim. Biophys. Acta* 1421: 19-31.
4. Preger, V., et al. 2001. Ascorbate-independent electron transfer between cytochrome b561 and a 27 kDa ascorbate peroxidase of bean hypocotyls. *Protoplasma* 217: 137-145.
5. Seike, Y., et al. 2003. Reversely-oriented cytochrome b561 in reconstituted vesicles catalyzes transmembrane electron transfer and supports extravesicular dopamine  $\beta$ -hydroxylase activity. *J. Biochem.* 134: 859-867.
6. Preger, V., et al. 2005. Identification of an ascorbate-dependent cytochrome b of the tonoplast membrane sharing biochemical features with members of the cytochrome b561 family. *Planta* 220: 365-375.
7. Su, D., et al. 2006. Three mammalian cytochromes b561 are ascorbate-dependent ferrireductases. *FEBS J.* 273: 3722-3734.

## CHROMOSOMAL LOCATION

Genetic locus: CYBASC3 (human) mapping to 11q12.2.

## SOURCE

CYBASC3 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of CYBASC3 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138231 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CYBASC3 (C-14) is recommended for detection of CYBASC3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for CYBASC3 siRNA (h): sc-37375, CYBASC3 shRNA Plasmid (h): sc-37375-SH and CYBASC3 shRNA (h) Lentiviral Particles: sc-37375-V.

Molecular Weight of CYBASC3: 43 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.