

CYB561D2 (m): 293T Lysate: sc-119539

BACKGROUND

CYB561D2 (cytochrome b561 domain-containing protein 2), also known as putative tumor suppressor protein 101F6, is a 222 amino acid highly hydrophobic protein that contains 6 membrane spanning domains. Localized to endosomes and endoplasmic reticulum of the perinuclear region, CYB561D2 contains 2 heme-binding sites, through which it reduces ferric ions. CYB561D2 is ubiquitously expressed, with highest levels in lung, liver and kidney. Though expression of CYB561D2 is abundant in normal lung bronchial epithelial cells, CYB561D2 is absent in most lung cancers. The gene encoding CYB561D2 maps to human chromosome 3p21.31, a region that is prone to genetic alterations and is associated with frequent and early allele loss in many human cancers. Exogenous expression of CYB561D2 leads to the induction of caspase-independent apoptotic and autophagic pathways, resulting in the synergistic killing of tumor cells. This suggests an important role for CYB561D2 as a therapeutic intervention in cancer treatment.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Cyb561d2 (mouse) mapping to 9 F1.

PRODUCT

CYB561D2 (m): 293T Lysate represents a lysate of mouse CYB561D2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CYB561D2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CYB561D2 antibodies. Recommended use: 10-20 µl per lane.

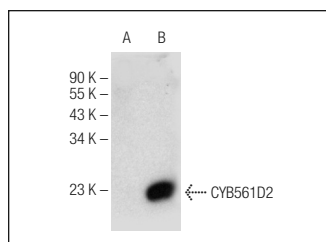
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CYB561D2 (C-2): sc-373870 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse CYB561D2 expression in CYB561D2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CYB561D2 (C-2): sc-373870. Western blot analysis of CYB561D2 expression in non-transfected: sc-117752 (A) and mouse CYB561D2 transfected: sc-119539 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.