

Sec24D (H-155): sc-135398

BACKGROUND

Sec24D (Sec24-related protein D) is ubiquitously expressed but exhibits predominant expression in heart, placenta, liver and pancreas. Sec24D belongs to the Sec24 subfamily of the Sec23/Sec24 family of proteins. Members of this family participate in vesicle trafficking from the endoplasmic reticulum (ER) to the Golgi apparatus. Sec24D is one of four mammalian proteins, namely Sec24A, Sec24B, Sec24C and Sec24D, that are highly related to the *Saccharomyces cerevisiae* protein Sec24, a component of the coat protein complex COPII that mediates the selective export of membrane proteins from the ER. Similar to its yeast counterpart, Sec24D functions as a component of the cytoplasmic COPII complex. The COPII complex acts as a coat, covering ER-derived transport vesicles and promoting the transport of secretory proteins to the Golgi apparatus. Sec24D shares 50% amino acid identity with the ubiquitously expressed Sec24C protein.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SEC24D (human) mapping to 4q26; Sec24d (mouse) mapping to 3 G1.

SOURCE

Sec24D (H-155) is a rabbit polyclonal antibody raised against amino acids 846-1000 mapping near the C-terminus of Sec24D of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Sec24D (H-155) is recommended for detection of Sec24D of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Sec24D (H-155) is also recommended for detection of Sec24D in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sec24D siRNA (h): sc-89055, Sec24D siRNA (m): sc-153313, Sec24D shRNA Plasmid (h): sc-89055-SH, Sec24D shRNA Plasmid (m): sc-153313-SH, Sec24D shRNA (h) Lentiviral Particles: sc-89055-V and Sec24D shRNA (m) Lentiviral Particles: sc-153313-V.

Molecular Weight of Sec24D: 113 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.

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.