

KD-Validated Anti-SEC24D Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1283

Specification

KD-Validated Anti-SEC24D Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession 094855

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 113 kDa , observed, 113 kDa

KDa

Gene Name SEC24D

Aliases SEC24D; SEC24 Homolog D, COPII Coat

Complex Component; KIAA0755; Protein Transport Protein Sec24D; SEC24-Related Protein D; SEC24 (S. Cerevisiae) Related Gene Family, Member D; SEC24 Family, Member D (S. Cerevisiae); SEC24 Related Gene Family, Member D; SEC24 Family

Member D; CLCRP2

Immunogen A synthesized peptide derived from human

SEC24D

KD-Validated Anti-SEC24D Rabbit Monoclonal Antibody - Additional Information

Gene ID 9871

Other Names

Protein transport protein Sec24D, SEC24-related protein D, SEC24D (HGNC:10706)

KD-Validated Anti-SEC24D Rabbit Monoclonal Antibody - Protein Information

Name SEC24D (HGNC:10706)

Function

Component of the coat protein complex II (COPII) which promotes the formation of transport vesicles from the endoplasmic reticulum (ER). The coat has two main functions, the physical deformation of the endoplasmic reticulum membrane into vesicles and the selection of cargo molecules for their transport to the Golgi complex (PubMed: a

href="http://www.uniprot.org/citations/17499046" target="_blank">17499046, PubMed:18843296, PubMed:20427317). Plays a central role in cargo selection within the COPII complex and together with SEC24C may have a different specificity compared to SEC24A and SEC24B (PubMed:17499046, PubMed:<a



href="http://www.uniprot.org/citations/18843296" target="_blank">18843296, PubMed:20427317). May more specifically package GPI-anchored proteins through the cargo receptor TMED10 (PubMed:20427317). May also be specific for IxM motif-containing cargos like the SNAREs GOSR2 and STX5 (PubMed:18843296).

Cellular Location

Cytoplasmic vesicle, COPII-coated vesicle membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P53992}; Cytoplasmic side {ECO:0000250|UniProtKB:P53992}. Endoplasmic reticulum membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P53992}; Cytoplasmic side {ECO:0000250|UniProtKB:P53992}. Cytoplasm, cytosol {ECO:0000250|UniProtKB:P53992}

Tissue Location

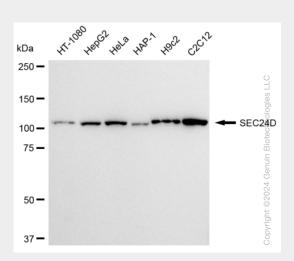
Ubiquitously expressed, with higher amounts in placenta, pancreas, heart and liver.

KD-Validated Anti-SEC24D Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

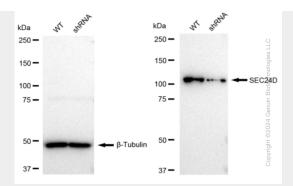
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-SEC24D Rabbit Monoclonal Antibody - Images

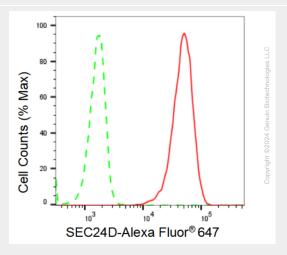


Western blotting analysis using anti-SEC24D antibody (Cat#AGI1283). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SEC24D antibody (Cat#AGI1283, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

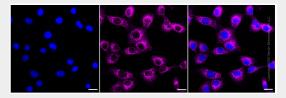




Western blotting analysis using anti-SEC24D antibody (Cat#AGI1283). SEC24D expression in wild type (WT) and SEC24D shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-SEC24D antibody (Cat#AGI1283, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of SEC24D expression in C2C12 cells using SEC24D antibody (Cat#AGI1283, 1:2,000). Green, isotype control; red, SEC24D.



Immunocytochemical staining of C2C12 cells with SEC24D antibody (Cat#AGI1283, 1:1,000). Nuclei were stained blue with DAPI; SEC24D was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: $20~\mu m$.