

Product Name: KD-Validated GDI1 Mouse Monoclonal Antibody**Catalog #: KVA00531**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:2,500-1:10,000
Molecular Weight	Calculated MW: 50.6kDa

Antigen Information

Gene Name	GDI1 GDI1; GDP Dissociation Inhibitor 1; RABGDI1; OPHN2; Oligophrenin-2; XAP-4; GDIL; Guanosine Diphosphate Dissociation Inhibitor 1; Rab GDP-Dissociation Inhibitor, Alpha; Rab
Alternative Names	GDP Dissociation Inhibitor Alpha; Protein XAP-4; Rab GDI Alpha; FLJ41411; MRX41; MRX48; GDI-1; Testis Secretory Sperm-Binding Protein Li 208a; Mental Retardation, X-Linked 41; Mental Retardation, X-Linked 48; RABGDI1A; XLID41; XAP4; 1A
Gene ID	2664.0
SwissProt ID	P31150
Immunogen	Recombinant protein of human GDI1

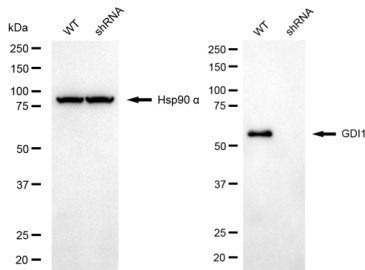
Background

GDP dissociation inhibitors are proteins that regulate the GDP-GTP exchange reaction of members of the rab family, small GTP-binding proteins of the ras superfamily, that are involved in vesicular trafficking of molecules between cellular organelles. GDIs slow the rate of dissociation of GDP from rab proteins and release GDP from membrane-bound rabs. GDI1 is expressed primarily in neural and sensory tissues. Mutations in GDI1 have been linked to X-linked nonspecific cognitive disability. [provided by RefSeq, Jul 2008]

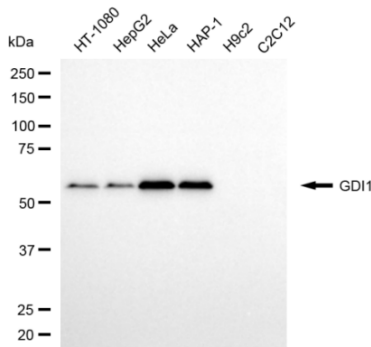
Research Area

Cell Biology

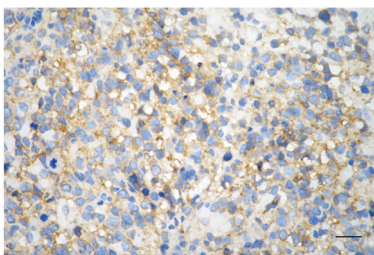
Image Data



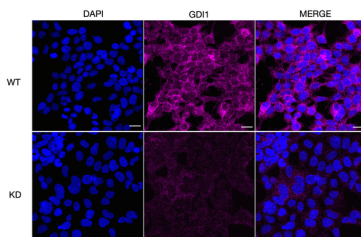
Western blotting analysis using GDI1 antibody (KVA00531). GDI1 expression in wild-type (WT) and GDI1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with GDI1 antibody (KVA00531, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



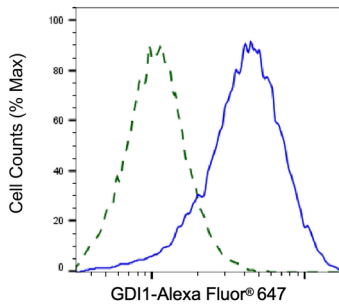
Western blotting analysis using GDI1 antibody (KVA00531). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with GDI1 antibody (KVA00531, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



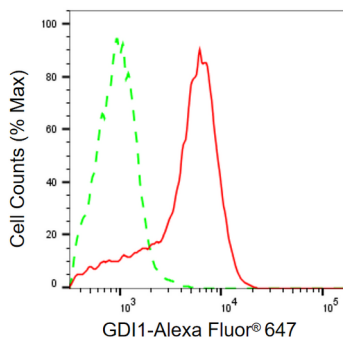
Immunohistochemistry was performed on paraffin-embedded human glioblastoma using GDI1 antibody (KVA00531, 1:5,000). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using GDI1 antibody (KVA00531, 1:1,000). Top panel: wild-type (WT); Bottom panel: GDI1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; GDI1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Validation of GDI1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with GDI1 antibody (KVA00531, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of GDI1 expression in HAP-1 cells using GDI1 antibody (KVA00531, 1:2,000). Green, isotype control; red, GDI1.