

Product Name: KD-Validated Katanin Catalytic Subunit A1 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVAAb01174

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit 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 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 56.0kDa

Antigen Information

Gene Name	KATNA1 KATNA1; Katanin Catalytic Subunit A1; Katanin P60 (ATPase Containing) Subunit A 1; Katanin
Alternative Names	P60 ATPase-Containing Subunit A1; Katanin P60 Subunit A1; P60 Katanin; Katanin P60 (ATPase-Containing) Subunit A 1; EC 5.6.1.1; EC 3.6.4.3
Gene ID	11104.0
SwissProt ID	O75449
Immunogen	A synthesized peptide derived from human p60 katanin

Background

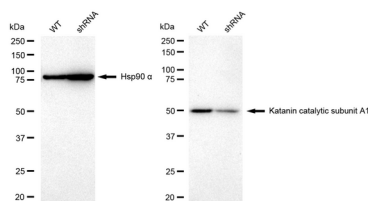
Microtubules, polymers of alpha and beta tubulin subunits, form the mitotic spindle of a dividing cell and help to organize

membranous organelles during interphase. Katanin is a heterodimer that consists of a 60 kDa ATPase (p60 subunit A 1) and an 80 kDa accessory protein (p80 subunit B 1). The p60 subunit acts to sever and disassemble microtubules, while the p80 subunit targets the enzyme to the centrosome. This gene encodes the p80 subunit. This protein is a member of the AAA family of ATPases. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Feb 2011]

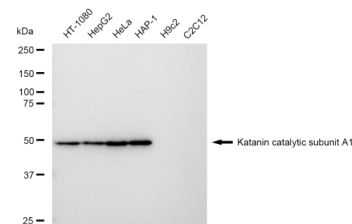
Research Area

Cell Biology, Neuroscience

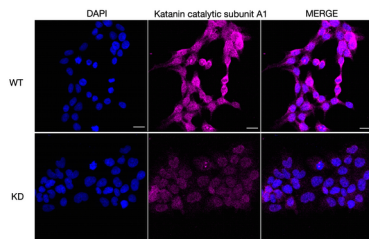
Image Data



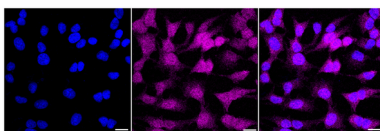
Western blotting analysis using katanin catalytic subunit A1 antibody (KVA01174). Katanin catalytic subunit A1 expression in wild type (WT) and katanin catalytic subunit A1 (KATNA1) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with katanin catalytic subunit A1 antibody (KVA01174, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



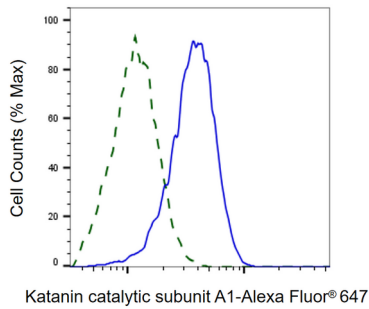
Western blotting analysis using Katanin catalytic subunit A1 antibody (KVA01174). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Katanin catalytic subunit A1 antibody (KVA01174, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



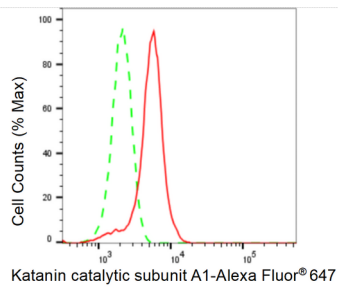
Immunocytochemical staining of HeLa cells using katanin catalytic subunit A1 antibody (KVA01174, 1:1,000), Top panel: wild-type (WT); Bottom panel: KATNA1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Katanin catalytic subunit A1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of HeLa cells with Katanin catalytic subunit A1 antibody (KVA01174, 1:1,000). Nuclei were stained blue with DAPI; Katanin catalytic subunit A1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.



Validation of Katanin catalytic subunit A1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Katanin catalytic subunit A1 antibody (KVA01174, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Katanin catalytic subunit A1 expression in HeLa cells using Katanin catalytic subunit A1 antibody (KVA01174, 1:2,000). Green, isotype control; red, Katanin catalytic subunit A1.