Product Datasheet

RGL2 Antibody (4D10) - Azide and BSA Free
H00005863-M02

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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Publications: 6

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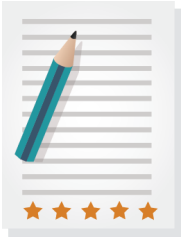
Updated 2/21/2025 v.20.1



H00005863-M02

RGL2 Antibody (4D10) - Azide and BSA Free

Product Information

Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	4D10
Preservative	No Preservative
Isotype	IgG1
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4

Product Description

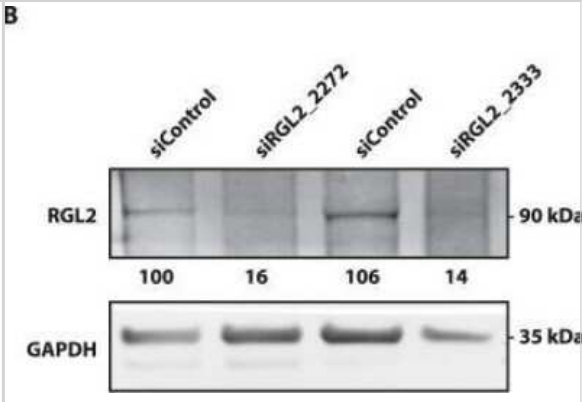
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	5863
Gene Symbol	RGL2
Species	Human
Specificity/Sensitivity	RGL2 - ral guanine nucleotide dissociation stimulator-like 2
Immunogen	RGL2 (AAH32681, 644 a.a. ~ 743 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. PGASDCRIIRVQMELGEDGSVYKSILVTSQDKAPSVISRVLKKNNRDSAVASEY ELVQLLPGERELTIPASANVFYAMDGASHDFLLRQRRRSSTATPGV
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.

Product Application Details

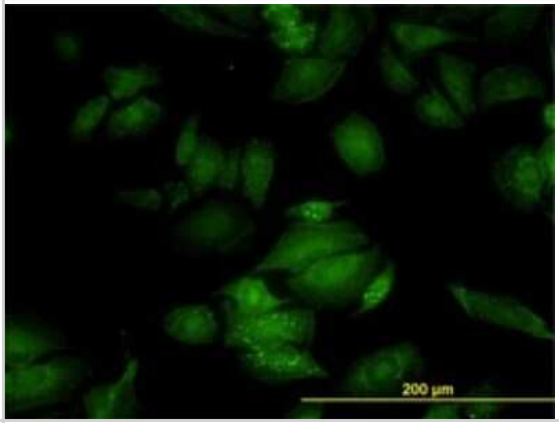
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1:500, ELISA, Immunocytochemistry/ Immunofluorescence
Application Notes	Antibody reactivity against cell lysate and recombinant protein for WB. It has also been used for IF and ELISA.

Images

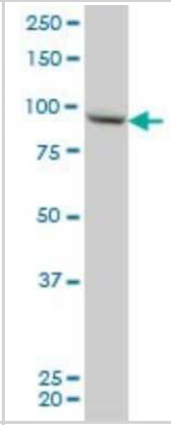
Western Blot: RGL2 Antibody (4D10) [H00005863-M02] - Impact of RGL2 depletion on RalB activation at autophagosomes upon starvation. Validation of RGL2 depletions. Representative western blots for RGL2 and GAPDH from cell lysates of HEK-HT cells prepared 72 hrs after transfection with the indicated siRNAs. Quantifications of RGL2 protein depletion, normalized for siControl condition (=100), are shown below the WB. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41598-019-45443-1), licensed under a CC-BY license.



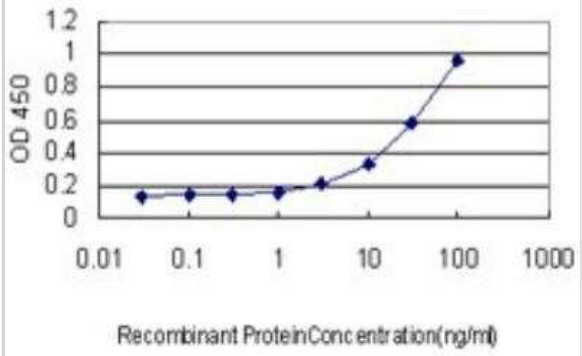
Immunocytochemistry/Immunofluorescence: RGL2 Antibody (4D10) [H00005863-M02] - Analysis of monoclonal antibody to RGL2 on HeLa cell. Antibody concentration 10 ug/ml.



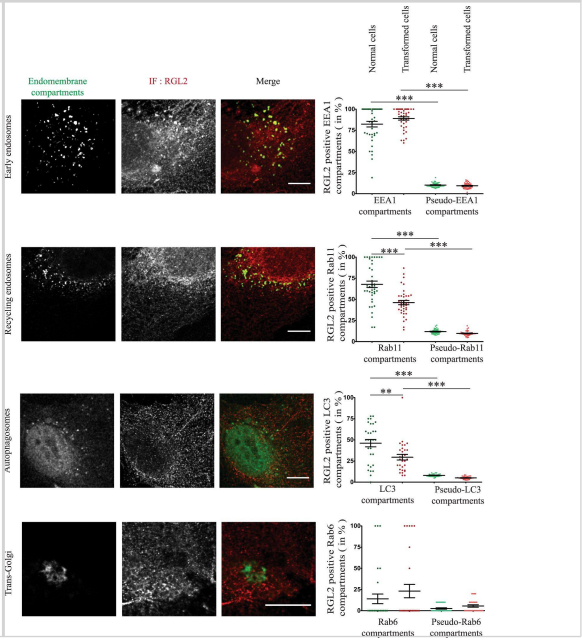
Western Blot: RGL2 Antibody (4D10) [H00005863-M02] - RGL2 monoclonal antibody (M02), clone 4D10 Analysis of RGL2 expression in HeLa.



ELISA: RGL2 Antibody (4D10) [H00005863-M02] - Detection limit for recombinant GST tagged RGL2 is approximately 1ng/ml as a capture antibody.



Immunocytochemistry/ Immunofluorescence: RGL2 Antibody (4D10) [H00005863-M02] - Localization of RGL2 at different endomembrane compartments. HEK-HT (Normal cells) & HEK-HT-H-RasV12 (Transformed cells) cells were fixed & imaged for endogenous RGL2 (IF anti-RGL2, represented in red), together with EEA1 (early endosome marker, IF anti-EEA1, represented in green), GFP-Rab11 (recycling endosome marker, represented in green), GFP-Rab6 (Trans-Golgi marker, represented in green), or iRFP-LC3 (autophagosome marker, represented in green). Representative confocal cross sections of normal cells are shown (left). Quantifications are reported for both normal & transformed cells (right). Localization was calculated as percentage (%) of the indicated endomembrane compartments positive for RGL2, as compared to the control pseudo-compartments. Each dot corresponds to one cell. Graph represents mean ± SEM of 21 to 40 cells from 3–4 independent experiments. For statistics Mann Whitney test was used. **p value < 0.01, ***p value < 0.001. Scale bars are 10 µm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31222145), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: RGL2 Antibody (4D10) [H00005863-M02] - Impact of RGL2 depletion on RalB activation at autophagosomes upon starvation. (A) Modulation by autophagy of RalB activity at autophagosomes upon RGL2 depletion. Normal HEK-HT cells were transfected with indicated siRNAs (day 0), then transfected with FRET RalB biosensor & Cherry-LC3 plasmids (day 2), & incubated in either basal (DMEM) or starvation (EBSS) medium (4 hours) before imaging (day 3). Graph represents mean ± SEM of n = 17 to 57 cells per condition, from 3 independent experiments. To compare DMEM versus EBSS conditions Mann Whitney test was used, **p < 0.01, ***, & p < 0.001. (B) Validation of RGL2 depletions. Representative western blots for RGL2 & GAPDH from cell lysates of HEK-HT cells prepared 72 hrs after transfection with the indicated siRNAs. Quantifications of RGL2 protein depletion, normalized for siControl condition (=100), are shown below the WB. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/31222145), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

Naushin L. Hindul, Lauren R. Abbott, Sumaya M.D. Adan, Kornelis R. Straatman, Andrew M. Fry, Kouji Hirota, Kayoko Tanaka Endogenous oncogenic KRAS expression increases cell proliferation and motility in near-diploid hTERT RPE-1 cells The Journal of Biological Chemistry 2024-05-23 [PMID: 38796063]

Hindul N, Abbott L, Adan S et al. Endogenous oncogenic KRAS expression increases cell proliferation and motility in near-diploid hTERT RPE-1 cells bioRxiv 2023-09-08 (WB, ICC/IF, Human)

Zago G, Veith I, Singh MK et al. RalB directly triggers invasion downstream Ras by mobilizing the Wave complex eLife 2018-10-15 [PMID: 30320548]

Kumar Singh M, Martin APJ, Joffre C et al. Localization of RalB signaling at endomembrane compartments and its modulation by autophagy Sci Rep 2019-06-20 [PMID: 31222145] (ICC/IF, WB)

Castro AF, Campos T, Babcock JT et al. M-Ras induces Ral and JNK activation to regulate MEK/ERK-independent gene expression in MCF-7 breast cancer cells. J Cell Biochem. 2011-11-17 [PMID: 22121046]

Vigil D, Martin TD, Williams F et al. Aberrant overexpression of the Rgl2 Ral small GTPase-specific guanine nucleotide exchange factor promotes pancreatic cancer growth through Ral-dependent and Ral-independent mechanisms. J Biol Chem 285(45):34729-40. 2010-11-05 [PMID: 20801877]

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
NBP2-68676PEP	RGL2 Recombinant Protein Antigen

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