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DRG1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12620b

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	Q9Y295
Other Accession	P32233, Q3MHP5, NP_004138.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32151
Calculated MW	40542
Antigen Region	334-363

Additional Information

Gene ID	4733
Other Names	Developmentally-regulated GTP-binding protein 1, DRG-1, Neural precursor cell expressed developmentally down-regulated protein 3, NEDD-3, DRG1, NEDD3
Target/Specificity	This DRG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 334-363 amino acids from the C-terminal region of human DRG1.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DRG1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DRG1 {ECO:0000303|PubMed:29915238, ECO:0000312|HGNC:HGNC:3029}

Function	Catalyzes the conversion of GTP to GDP through hydrolysis of the gamma-phosphate bond in GTP (PubMed:23711155, PubMed:29915238, PubMed:37179472). Appears to have an intrinsic GTPase activity that is stimulated by ZC3H15/DFRP1 binding likely by increasing the affinity for the potassium ions (PubMed:23711155). When hydroxylated at C-3 of 'Lys-22' by JMJD7, may bind to RNA and play a role in translation (PubMed:19819225, PubMed:29915238). Binds to microtubules and promotes microtubule polymerization and stability that are required for mitotic spindle assembly during prophase to anaphase transition. GTPase activity is not necessary for these microtubule-related functions (PubMed:28855639).
Cellular Location	Nucleus. Cytoplasm. Note=The DRG1-ZC3H15/DFRP1 complex associates with polysomes
Tissue Location	High levels in skeletal muscle, heart, and kidney. Intermediate levels in liver, placenta and brain. Low levels in colon, thymus, spleen, small intestine, lung and leukocytes

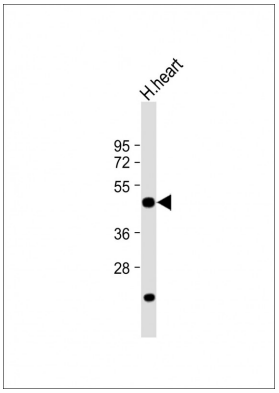
Background

DRG1 may play a role in cell proliferation, differentiation and death.

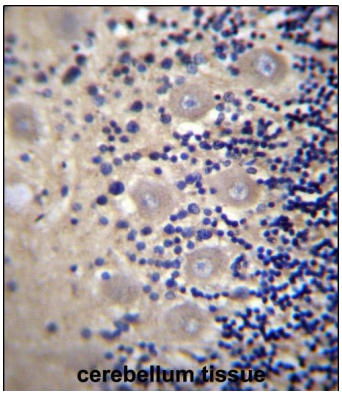
References

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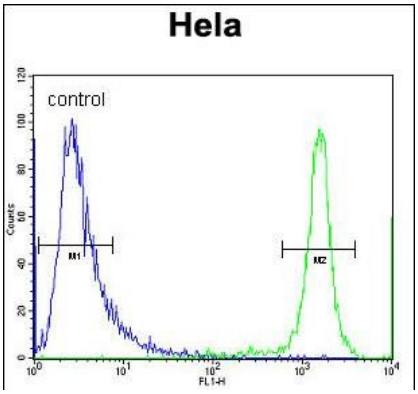
Images



Anti-DRG1 Antibody (C-term) at 1:2000 dilution + Human heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



DRG1 Antibody (C-term) (Cat. #AP12620b)immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of DRG1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



DRG1 Antibody (C-term) (Cat. #AP12620b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.