

DRG1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12620b

Specification

DRG1 Antibody (C-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	O9Y295
Other Accession	P32233 , Q3MHP5 , NP_004138.1
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	334-363

DRG1 Antibody (C-term) - 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

WB~~1:2000
IHC-P~~1:10~50
FC~~1:10~50

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.

DRG1 Antibody (C-term) - 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

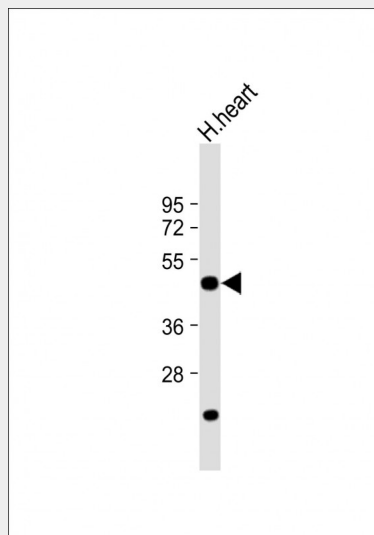
High levels in skeletal muscle, heart, and kidney. Intermediate levels in liver, placenta and brain. Low levels in colon, thymus, spleen, small intestine, lung and leukocytes

DRG1 Antibody (C-term) - Protocols

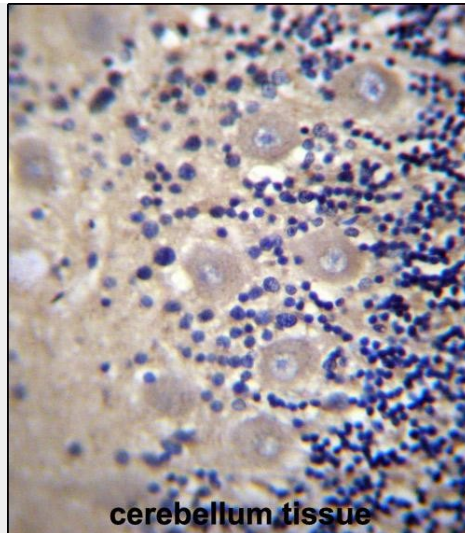
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

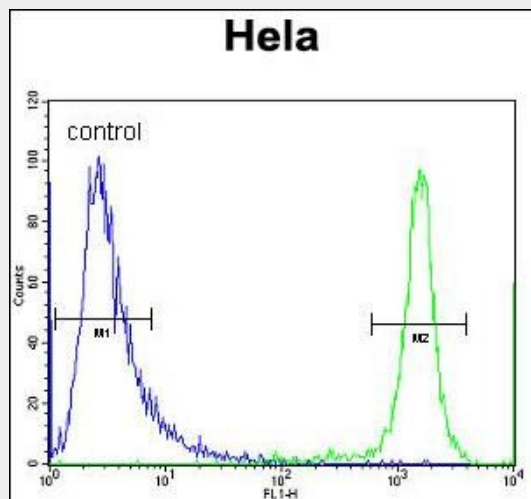
DRG1 Antibody (C-term) - Images



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% NFDN/TBST.



DRG1 Antibody (C-term) (Cat. #AP12620b) immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by DAB staining with peroxidase conjugation of the secondary antibody. 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.

DRG1 Antibody (C-term) - Background

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

DRG1 Antibody (C-term) - References

de Krom, M., et al. *Biol. Psychiatry* 65(7):625-630(2009)
 Bandyopadhyay, S., et al. *Cancer Res.* 66(24):11983-11990(2006)
 Bandyopadhyay, S., et al. *Oncogene* 23(33):5675-5681(2004)
 Collins, J.E., et al. *Genome Biol.* 5 (10), R84 (2004) :
 Bandyopadhyay, S., et al. *Cancer Res.* 63(8):1731-1736(2003)