

# DRG1 Antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI16149

#### **Product Information**

Application WB
Primary Accession Q9Y295
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 40542

#### **Additional Information**

**Gene ID** 4733

Alias Symbol DRG1, NEDD3,

Other Names Developmentally-regulated GTP-binding protein 1, DRG-1, Neural precursor

cell expressed developmentally down-regulated protein 3, NEDD-3, DRG1,

NEDD3

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

**Reconstitution & Storage** Add 50 &mu, I of distilled water. Final Anti-DRG1 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

-20°C. Avoid repeat freeze-thaw cycles.

**Precautions** DRG1 Antibody - middle region 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).

Nucleus. Cytoplasm. Note=The DRG1-ZC3H15/DFRP1 complex associates with

Cellular Location 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

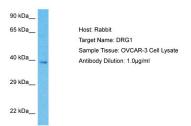
## **Background**

Critical regulator of cell growth under specific conditions. Implicated in differentiation and cell cycle arrest.

### References

Zhao X.-F.,et al.Biochim. Biophys. Acta 1448:109-114(1998). Li B.,et al.Biochim. Biophys. Acta 1491:196-204(2000). Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004).

## **Images**



Host: Rabbit Target Name: DRG1

Sample Tissue: OVCAR-3 Whole Cell lysates

Antibody Dilution: 1.0µg/ml

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