

Goat Anti-GTRAP3-18 / JWA Antibody

Peptide-affinity purified goat antibody Catalog # AF1515a

Specification

Goat Anti-GTRAP3-18 / JWA Antibody - Product Information

Application WB, IHC, IF, FC, Pep-ELISA

Primary Accession <u>075915</u>

Other Accession NP 006398, 10550

Reactivity
Host
Clonality
Concentration
Human
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 21615

Goat Anti-GTRAP3-18 / JWA Antibody - Additional Information

Gene ID 10550

Other Names

PRA1 family protein 3, ADP-ribosylation factor-like protein 6-interacting protein 5, ARL-6-interacting protein 5, Aip-5, Cytoskeleton-related vitamin A-responsive protein, Dermal papilla-derived protein 11, GTRAP3-18, Glutamate transporter EAAC1-interacting protein, JM5, Prenylated Rab acceptor protein 2, Protein JWa, Putative MAPK-activating protein PM27, ARL6IP5, DERP11, JWA, PRA2, PRAF3

Dilution

WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50 Pep-ELISA~~N/A

Format

0.5~mg~lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-GTRAP3-18 / JWA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GTRAP3-18 / JWA Antibody - Protein Information



Name ARL6IP5

Synonyms DERP11, JWA, PRA2, PRAF3

Function

Regulates intracellular concentrations of taurine and glutamate. Negatively modulates SLC1A1/EAAC1 glutamate transport activity by decreasing its affinity for glutamate in a PKC activity- dependent manner. Plays a role in the retention of SLC1A1/EAAC1 in the endoplasmic reticulum.

Cellular Location

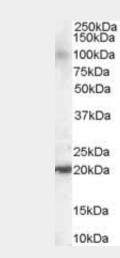
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9ES40}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q9ES40}; Multi-pass membrane protein. Cytoplasm {ECO:0000250|UniProtKB:Q9ES40}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9ES40}. Note=Also exists as a soluble form in the cytoplasm. Associated with microtubules {ECO:0000250|UniProtKB:Q9ES40}

Goat Anti-GTRAP3-18 / JWA Antibody - Protocols

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

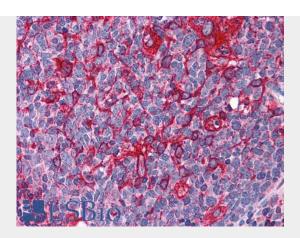
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-GTRAP3-18 / JWA Antibody - Images

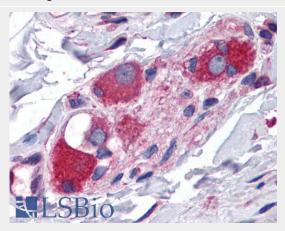


AF1515a staining (0.1 μ g/ml) of Human Brain lysate (RIPA buffer, 35 μ g total protein per lane). Primary incubated for 1 hour. Detected by chemiluminescence.





AF1515a (3.75 μ g/ml) staining of paraffin embedded Human Tonsil. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1515a (3.75 μ g/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

250kDa 150kDa 100kDa 75kDa 50kDa 37kDa 25kDa 20kDa

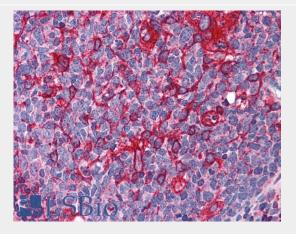
EB05631 (1ug/ml) staining of Human Cerebellum lysate (35 μ g protein in RIPA buffer) . Detected by chemiluminescence.



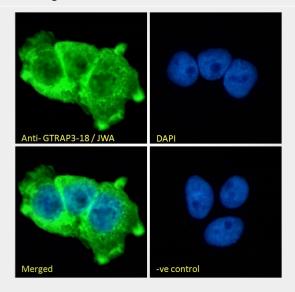
250kDa
150kDa
100kDa
75kDa
50kDa
37kDa

25kDa
20kDa
15kDa
10kDa

EB05631 (lug/ml) staining of K562 cell lysate (35 μ g protein in RIPA buffer) . Detected by chemiluminescence.

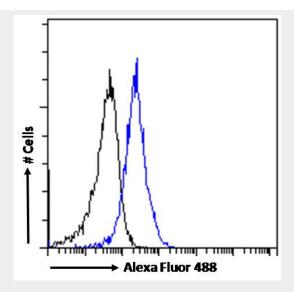


EB05631 (3.75μg/ml) staining of paraffin embedded Human Tonsil. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

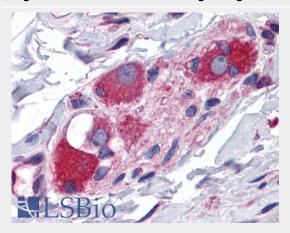


EB05631 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing plasma membrane and ER/cytoplasmic staining. The





EB05631 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) fol



EB05631 (3.75μg/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-GTRAP3-18 / JWA Antibody - Background

Expression of this gene is affected by vitamin A. The encoded protein of this gene may be associated with the cytoskeleton. A similar protein in rats may play a role in the regulation of cell differentiation. The rat protein binds and inhibits the cell membrane glutamate transporter EAAC1. The expression of the rat gene is upregulated by retinoic acid, which results in a specific reduction in EAAC1-mediated glutamate transport.

Goat Anti-GTRAP3-18 / JWA Antibody - References

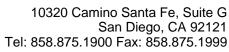
Genome-wide association study of alcohol dependence implicates a region on chromosome 11. Edenberg HJ, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201924.

Modulation of the neural glutamate transporter EAAC1 by the addicsin-interacting protein ARL6IP1. Akiduki S, et al. J Biol Chem, 2008 Nov 14. PMID 18684713.

The endoplasmic reticulum exit of glutamate transporter is regulated by the inducible mammalian Yip6b/GTRAP3-18 protein. Ruggiero AM, et al. J Biol Chem, 2008 Mar 7. PMID 18167356.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

Regulation of glutathione synthesis via interaction between glutamate transport-associated protein





3-18 (GTRAP3-18) and excitatory amino acid carrier-1 (EAAC1) at plasma membrane. Watabe M, et al. Mol Pharmacol, 2007 Nov. PMID 17646425.