

Goat Anti-BERP / RNF22 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1149a**Specification**

Goat Anti-BERP / RNF22 Antibody - Product Information

Application	WB, E
Primary Accession	O75382
Other Accession	NP_150594 , 10612 , 55992 (mouse) , 83616 (rat)
Reactivity	Mouse
Predicted	Human, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	80830

Goat Anti-BERP / RNF22 Antibody - Additional Information**Gene ID** 10612**Other Names**

Tripartite motif-containing protein 3, Brain-expressed RING finger protein, RING finger protein 22, RING finger protein 97, TRIM3, BERP, RNF22, RNF97

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg IgG/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-BERP / RNF22 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-BERP / RNF22 Antibody - Protein Information**Name** TRIM3**Synonyms** BERP, RNF22, RNF97

Function

E3 ubiquitin ligase that plays essential roles in neuronal functions such as regulation of neuronal plasticity, learning, and memory (By similarity). In addition to its neuronal functions, participates in other biological processes such as innate immunity or cell cycle regulation. Component of the cytoskeleton-associated recycling or transport complex in neurons, polyubiquitinates gamma-actin, thus regulating neuronal plasticity, learning, and memory (By similarity). Ubiquitinates postsynaptic scaffold GKAP, a neuronal substrate involved in synaptic remodeling and thereby modulates dendritic spine morphology (By similarity). Positively regulates motility of microtubule-dependent motor protein KIF21B (By similarity). Induces growth arrest via its RING-dependent E3 ligase activity and ubiquitinates CDKN1A (PubMed: [24393003](http://www.uniprot.org/citations/24393003)). Positively regulates TLR3- mediated signaling by mediating 'Lys-63'-linked polyubiquitination of TLR3 (PubMed: [32878999](http://www.uniprot.org/citations/32878999)). In turn, promotes the recognition and sorting of polyubiquitinated TLR3 by the ESCRT complexes (PubMed: [32878999](http://www.uniprot.org/citations/32878999)).

Cellular Location

Cytoplasm. Early endosome Golgi apparatus, trans-Golgi network Cell projection, dendrite {ECO:0000250|UniProtKB:Q9R1R2}. Note=Mainly located in the Golgi apparatus and transported to the early endosomes upon stimulation with dsRNA.

Tissue Location

Expressed in brain, heart, uterus and testis.

Goat Anti-BERP / RNF22 Antibody - Protocols

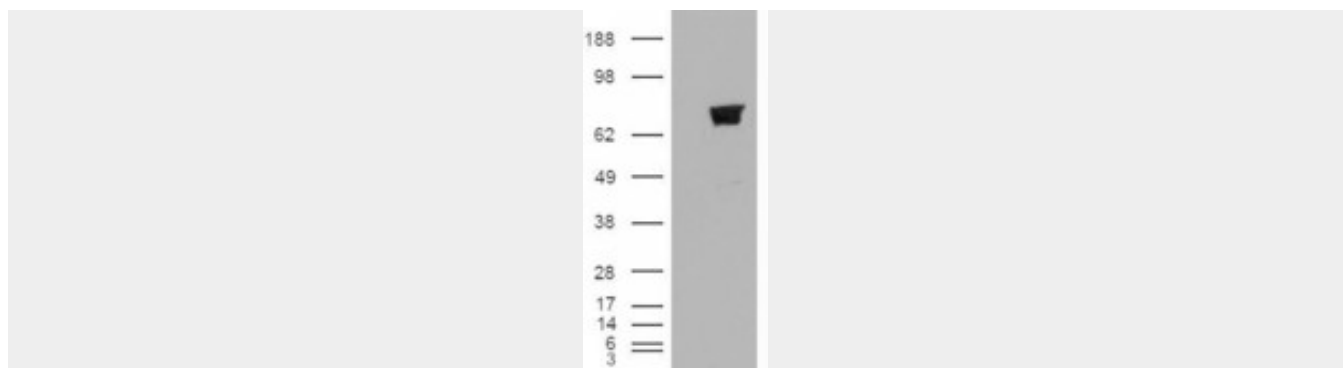
Provided below are standard protocols that you may find useful for product applications.

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

Goat Anti-BERP / RNF22 Antibody - Images



AF1149a staining (0.05 µg/ml) of Mouse Brain lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



HEK293 overexpressing TRIM3 (RC211928) and probed with AF1149a (mock transfection in first lane), tested by Origene.

Goat Anti-BERP / RNF22 Antibody - Background

The protein encoded by this gene is a member of the tripartite motif (TRIM) family, also called the 'RING-B-box-coiled-coil' (RBCC) subgroup of RING finger proteins. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This protein localizes to cytoplasmic filaments. It is similar to a rat protein which is a specific partner for the tail domain of myosin V, a class of myosins which are involved in the targeted transport of organelles. The rat protein can also interact with alpha-actinin-4. Thus it is suggested that this human protein may play a role in myosin V-mediated cargo transport. Alternatively spliced transcript variants encoding the same isoform have been identified.

Goat Anti-BERP / RNF22 Antibody - References

Identification of BERP (brain-expressed RING finger protein) as a p53 target gene that modulates seizure susceptibility through interacting with GABA(A) receptors. Cheung CC, et al. Proc Natl Acad Sci U S A, 2010 Jun 29. PMID 20543135.

Glucocorticoid-induced gene tripartite motif-containing 63 (TRIM63) promotes differentiation of osteoblastic cells. Azuma K, et al. Endocr J, 2010. PMID 20173306.

Monoubiquitinylation regulates endosomal localization of Lst2, a negative regulator of EGF receptor signaling. Mosesson Y, et al. Dev Cell, 2009 May. PMID 19460345.

Loss of heterozygosity of TRIM3 in malignant gliomas. Boulay JL, et al. BMC Cancer, 2009 Feb 27. PMID 19250537.

Prefrontal cortex shotgun proteome analysis reveals altered calcium homeostasis and immune system imbalance in schizophrenia. Martins-de-Souza D, et al. Eur Arch Psychiatry Clin Neurosci, 2009 Apr. PMID 19165527.