

REEP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54618

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9H902
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22255
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human REEP1
Epitope Specificity	53-150/201
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane. Mitochondrion membrane; Multi-passmembrane protein. Endoplasmic reticulum.
SIMILARITY	Belongs to the DP1 family.
SUBUNIT	Interacts with SPAST and ATL1; it preferentiallyinteracts with SPAST isoform 1. Interacts (via C-terminus) withmicrotubules. Interacts with odorant receptor proteins
Post-translational modifications	Belongs to the DP1 family.
DISEASE	Defects in REEP1 are the cause of spastic paraplegia autosomal dominant type 31 (SPG31) [MIM:610250]. Spastic paraplegia is a neurodegenerative disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Rate of progression and the severity of symptoms are quite variable. Initial symptoms may include difficulty with balance, weakness and stiffness in the legs, muscle spasms, and dragging the toes when walking. In some forms of the disorder, bladder symptoms (such as incontinence) may appear, or the weakness and stiffness may spread to other parts of the body.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Transport of G protein-coupled receptors (GPCRs) to the cell surface membrane is critical for receptor-ligand recognition. Mammalian GPCR odorant receptors (ORs), when heterologously expressed in cells, are poorly expressed on the cell surface. REEP1 (receptor expression-enhancing protein 1), is a 201 amino acid multi-pass mitochondrion membrane protein that belongs to the DP1 family. REEP1 interacts with odorant receptor proteins and may enhance the cell surface expression of odorant receptors. Mutations in the REEP1 gene are the third most common cause of hereditary spastic paraplegia (HSP) after spastin and atlastin gene mutations. Mutations in the REEP1 gene also cause spastic paraplegia autosomal dominant type 31, a neurodegenerative disorder. The REEP1 gene is conserved in chimpanzee, dog, cow, mouse, rat, chicken, zebrafish, A.thaliana and rice, and maps to human chromosome 2p11.2.

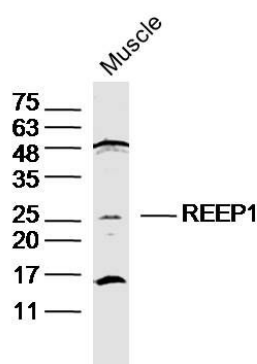
Additional Information

Gene ID	65055
Other Names	Receptor expression-enhancing protein 1, Spastic paraplegia 31 protein, REEP1, C2orf23, SPG31 {ECO:0000303 PubMed:23969831}
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	REEP1
Synonyms	C2orf23, SPG31 {ECO:0000303 PubMed:23969}
Function	Required for endoplasmic reticulum (ER) network formation, shaping and remodeling; it links ER tubules to the cytoskeleton. May also enhance the cell surface expression of odorant receptors (PubMed: 20200447). May play a role in long-term axonal maintenance (PubMed: 24478229).
Cellular Location	Membrane. Mitochondrion membrane; Multi-pass membrane protein. Endoplasmic reticulum Note=Localizes to endoplasmic reticulum tubular network
Tissue Location	Expressed in circumvallate papillae and testis.

Images



Sample: Muscle (Mouse) Lysate at 40 ug
Primary: Anti-REEP1 (AP54618) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 22kD
Observed band size: 25kD

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