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GPR37 Antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI15109

Specification

GPR37 Antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	O15354
Other Accession	NM_005302, NP_005293
Reactivity	**Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog**
Predicted	**Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**64kDa KDa**

GPR37 Antibody - C-terminal region - Additional Information

Gene ID 2861

Alias Symbol	**EDNRBL, PAELR, hET(B)R-LP**

Other Names
Prosaposin receptor GPR37, Endothelin B receptor-like protein 1, ETBR-LP-1, G-protein coupled receptor 37, Parkin-associated endothelin receptor-like receptor, PAELR, GPR37

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-GPR37 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
GPR37 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

GPR37 Antibody - C-terminal region - Protein Information

Name GPR37

Function
G-protein-coupled receptor that plays a role in several physiological pathways such as resolution of inflammatory pain and oligodendrocyte differentiation (By similarity). Acts as a receptor for several ligands including prosaposin, osteocalcin or neuroprotectin D1. Ligand binding induces endocytosis, followed by an ERK phosphorylation cascade (PubMed:11439185, PubMed:23690594). Acts as a

receptor for osteocalcin (OCN) to regulate oligodendrocyte differentiation and central nervous system myelination. Mechanistically, plays a negative role in oligodendrocyte differentiation and myelination during development via activation of the ERK1/2 signaling pathway. Therefore, regulates the stability of myelin or resistance of myelin itself to demyelination. Upon activation by neuroprotectin D1 (NPD1), promotes the activation of phagocytosis in macrophages as well as the shift in cytokine release toward an anti-inflammatory profile, and thus helps to reverse inflammatory pain. In addition, the increased macrophage phagocytosis mediates protection against sepsis upon pathogen infection. Additionally, extracellular vesicles derived from efferocyte express prosaposin, which binds to macrophage GPR37 to increase expression of the efferocytosis receptor TIM4 via an ERK-AP1-dependent signaling axis, leading to increased macrophage efferocytosis efficiency and accelerated resolution of inflammation (By similarity). May also act as a maturation factor of LRP6, protecting LRP6 from the endoplasmic reticulum (ER)-associated protein degradation (ERAD) and thereby promoting the Wnt/beta-catenin signaling pathway (PubMed:28341812).

Cellular Location
Cell projection, dendrite. Synapse Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein

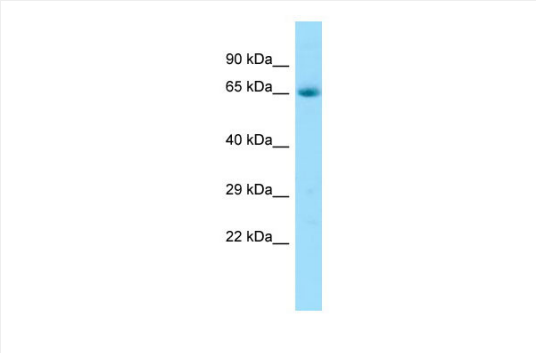
Tissue Location
Expressed in brain and spinal cord, and at lower levels in testis, placenta and liver, but no detectable expression observed in any other tissue. When overexpressed in cells, tends to become insoluble and unfolded. Accumulation of the unfolded protein may lead to dopaminergic neuronal death in juvenile Parkinson disease (PDJ).

GPR37 Antibody - C-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GPR37 Antibody - C-terminal region - Images



WB Suggested Anti-GPR37 Antibody Titration: 1.0 µg/ml
Positive Control: Fetal Heart

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Donohue P.J.,et al.Brain Res. Mol. Brain Res. 54:152-160(1998).
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Imai Y.,et al.Cell 105:891-902(2001).
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