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Anti-PACRG (RABBIT) Antibody

PACRG Antibody
Catalog # ASR5247

Specification

Anti-PACRG (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Mouse**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This affinity purified antibody has been tested for use in ELISA and western blot.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region of Human PACRG protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-PACRG (RABBIT) Antibody - Additional Information

Gene ID 135138

Other Names
135138

Purity
This affinity purified antibody is directed against human PACRG protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, mouse and chicken based on 100% homology for the immunogen sequence. Cross reactivity with PACRG protein from zebrafish and rat may occur as this sequence only varies by one amino acid residue (94% homology). Expect reactivity with both splice variants of this protein. Cross reactivity with PACRG homologues from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-PACRG (RABBIT) Antibody - Protein Information

Name PACRG

Synonyms GLUP

Function
Microtubule inner protein (MIP) part of the dynein-decorated doublet microtubules (DMTs) in cilia axoneme, which is required for motile cilia beating (PubMed:36191189). Suppresses cell death induced by accumulation of unfolded Pael receptor (Pael-R, a substrate of Parkin) (PubMed:14532270). Facilitates the formation of inclusions consisting of Pael-R, molecular chaperones, protein degradation molecules and itself when proteasome is inhibited (PubMed:14532270). May play an important role in the formation of Lewy bodies and protection of dopaminergic neurons against Parkinson disease (PubMed:14532270).

Cellular Location
Cytoplasm, cytoskeleton, cilium axoneme. Cytoplasm, cytoskeleton, flagellum axoneme {ECO:0000250|UniProtKB:Q9DAK2}

Tissue Location
Expressed in all immune tissues, spleen, lymph nodes, thymus, tonsils, leukocyte and bone marrow. Expressed also in heart, brain, skeletal muscle, kidney, lung and pancreas. Expressed in primary Schwann cells and very weakly by monocyte-derived macrophages the primary host cells of Mycobacterium leprae, the causative agent of leprosy. Component of Lewy bodies, intraneuronal inclusions found in the brain of Parkinson disease patients.

Anti-PACRG (RABBIT) 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 Cytomety
- Cell Culture

Anti-PACRG (RABBIT) Antibody - Images

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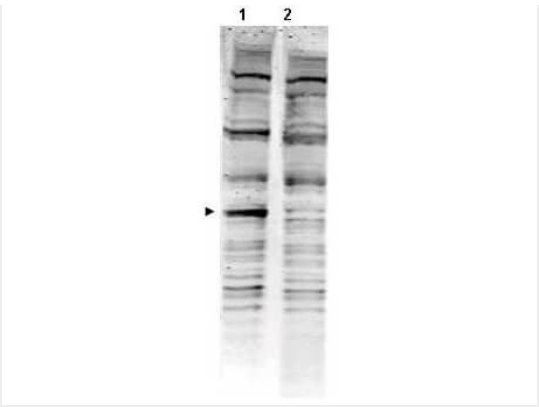

Western blot using Rockland's Affinity Purified anti-PACRG antibody shows detection of a band ~40 kDa corresponding to human PACRG (arrowhead lane 1). Specific reactivity with this band is blocked when the antibody is pre-incubated with the immunizing peptide (lane 2). Approximately 35 ug of a mouse embryonic fibroblast (MEF) whole cell (p/n W10-001-371) lysate was separated by 4-20% SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:1,500 for 2h at room temperature followed by washes and reaction with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] MX (611-132-122) for 45 min at room temperature. IRDye800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

Anti-PACRG (RABBIT) Antibody - Background

PACRG (also known as Parkin coregulated gene protein and PARK2 coregulated) is a gene located very close to parkin, in reverse orientation on the chromosome. It is thought to be co-transcribed with parkin by a bi-directional promoter between the two genes. PACRG is expressed in all immune tissues, spleen, lymph nodes, thymus, tonsils, leukocyte and bone marrow and is also expressed in heart, brain, skeletal muscle, kidney, lung and pancreas. PACRG is expressed in primary Schwann cells and very weakly by monocyte-derived macrophages, which are the primary host cells of Mycobacterium leprae, the causative agent of leprosy. Splice variants have been described for this protein.