

PACRG Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17656a

Specification

PACRG Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q96M98

Other Accession NP 001073847.1

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Rabbit
33342
46-74

PACRG Antibody (N-term) - Additional Information

Gene ID 135138

Other Names

Parkin coregulated gene protein, Molecular chaperone/chaperonin-binding protein, PARK2 coregulated gene protein, PACRG, GLUP

Target/Specificity

This PACRG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 46-74 amino acids from the N-terminal region of human PACRG.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

PACRG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PACRG Antibody (N-term) - 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). Facilitates the formation of inclusions consisting of Pael-R, molecular chaperones, protein degradation molecules and itself when proteasome is inhibited. 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

Tissue Location

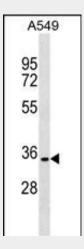
Expressed in all immune tissues, spleen, lymph nodes, thymus, tonsils, leukocyte and bone marrow. Expressed also in heart, brain, skeletal muscle, kidney, lung and pancreas. Expressed in primary Schwann cells and very weakly by monocyte-derived macrophages the primary host cells of Mycobacterium leprae,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

PACRG Antibody (N-term) - Protocols

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

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

PACRG Antibody (N-term) - Images



PACRG Antibody (N-term) (Cat. #AP17656a) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the PACRG antibody detected the PACRG protein (arrow).

PACRG Antibody (N-term) - Background

This gene encodes a protein that is conserved across metazoans. In vertebrates, this gene is linked in a head-to-head





arrangement with the adjacent parkin gene, which is associated with autosomal recessive juvenile Parkinson's disease. These genes are co-regulated in various tissues and they share a bi-directional promoter. Both genes are associated with susceptibility to leprosy. The parkin co-regulated gene protein forms a large molecular complex with chaperones, including heat shock proteins 70 and 90, and chaperonin components. This protein is also a component of Lewy bodies in Parkinson's disease patients, and it suppresses unfolded Pael receptor-induced neuronal cell death. Multiple transcript variants encoding different isoforms have been found for this gene.

PACRG Antibody (N-term) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Wilson, G.R., et al. Fertil. Steril. 93(7):2262-2268(2010) Dagda, R.K., et al. J. Bioenerg. Biomembr. 41(6):473-479(2009) Velez, D.R., et al. Int. J. Tuberc. Lung Dis. 13(9):1068-1076(2009) Taylor, J.M., et al. Parkinsonism Relat. Disord. 15(6):417-421(2009)