10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PACRG Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17656a

Product Information

Application	WB, E
Primary Accession	Q96M98
Other Accession	NP_001073847.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36712
Calculated MW	33342
Antigen Region	46-74

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 E~~Use at an assay dependent concentration.
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.

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.

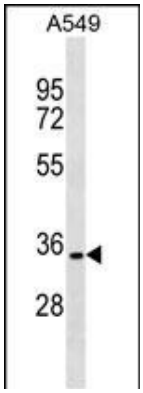
Background

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.

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)

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).

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