

# PACRG Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP17656a

# Specification

# PACRG Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q96M98</u>

# PACRG Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 135138

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# PACRG Antibody (N-term) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/36191189" target="\_blank">36191189</a>). 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:<a href="http://www.uniprot.org/citations/14532270" target="\_blank">14532270</a>).

**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) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

### PACRG Antibody (N-term) Blocking Peptide - Images

### PACRG Antibody (N-term) Blocking Peptide - Background

This gene encodes a protein that is conserved acrossmetazoans. In vertebrates, this gene is linked in a head-to-headarrangement with the adjacent parkin gene, which is associated withautosomal recessive juvenile Parkinson's disease. These genes areco-regulated in various tissues and they share a bi-directionalpromoter. Both genes are associated with susceptibility to leprosy. The parkin co-regulated gene protein forms a large molecularcomplex with chaperones, including heat shock proteins 70 and 90, and chaperonin components. This protein is also a component of Lewybodies in Parkinson's disease patients, and it suppresses unfoldedPael receptor-induced neuronal cell death. Multiple transcriptvariants encoding different isoforms have been found for this gene.

### PACRG Antibody (N-term) Blocking Peptide - 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)