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PACRG Rabbit pAb

Catalog # AP97957

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q96M98
Other Accession	Q96M98
Reactivity	Rat
Predicted	Human, Mouse, Rabbit, Zebrafish, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33342
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PACRG
Epitope Specificity	41-140/296
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBUNIT	Forms a large molecular chaperone complex containing heat shock proteins 70 and 90 and chaperonin components. Interacts with STIP1, PARK2, GPR37, HSPA8, TCP1/CCT1, CCT2, CCT3, CCT4, CCT5, CCT6A, CCT7, CCT8. Interacts with MEIG1 (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The deduced 257 amino acid protein PACRG (Parkin co-regulated gene) shows potential links to the ubiquitin/proteasome system. PACRG and Parkin are attached in a head-to-head arrangement on opposite DNA strands and share a common 5' flanking promoter region. The PACRG gene maps to chromosome 6q26; Northern blot analysis detects PACRG expression in all tissues examined except placenta. Using a positional cloning strategy in 197 Vietnamese leprosy simplex families (i.e. families with two unaffected parents and one affected child), significant connections between leprosy and 17 markers in the 5' regulatory region that PARK2 and PACRG share were observed. Possession of two or more of the 17 risk alleles is highly predictive of leprosy. PACRG 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.

Additional Information

Gene ID	135138
Other Names	BUG21; GLUP; HAK005771; PACRG2.1; PARK2CRG; pf12; 1700008H23Rik; RGD1561027; PACRG_HUMAN; PACRG; Molecular chaperone/chaperonin-binding protein; PARK2 coregulated gene protein; PACRG_MOUSE; Hypertension-related protein 1-like protein; parkin coregulated; PARK2 coregulated

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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