

C1orf170 Rabbit pAb

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Catalog # AP55752

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q5SV97
Predicted	Rat, Human, Mouse, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	81351
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human C1orf170
Epitope Specificity	601-696/696
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes lamin A. When defective, the LMNA gene product can build up in the nucleus and cause characteristic nuclear blebs. The mechanism of rapidly enhanced aging is unclear and is a topic of continuing exploration. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. A breakpoint has been identified in 1q which disrupts the DISC1 gene and is linked to schizophrenia. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma. The C1orf170 gene product has been provisionally designated C1orf170 pending further characterization. There are two isoforms of C1orf170 that are produced as a result of alternative splicing events.

Additional Information

Gene ID	84808
Other Names	PGC-1 and ERR-induced regulator in muscle protein 1, PPARGC1 and ESRR-induced regulator in muscle 1, Peroxisome proliferator-activated receptor gamma coactivator 1 and estrogen-related receptor-induced regulator in muscle 1, PERM1, C1orf170

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=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	PERM1
Synonyms	C1orf170
Function	Regulates the expression of selective PPARGC1A/B and ESRRB/B/G target genes with roles in glucose and lipid metabolism, energy transfer, contractile function, muscle mitochondrial biogenesis and oxidative capacity. Required for the efficient induction of MT-CO2, MT-CO3, COX4I1, TFB1M, TFB2M, POLRMT and SIRT3 by PPARGC1A. Positively regulates the PPARGC1A/ESRRG-induced expression of CKMT2, TNNT3 and SLC2A4 and negatively regulates the PPARGC1A/ESRRG-induced expression of PDK4.
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:Q149B8}. Nucleus {ECO:0000250 UniProtKB:Q149B8}. Note=Shows a nuclear localization in the presence of PPARGC1A. {ECO:0000250 UniProtKB:Q149B8}
Tissue Location	Muscle-specific expression is increased by endurance exercise.

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