

BRP44 Rabbit pAb

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Catalog # AP59002

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O95563
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14279
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human BRP44
Epitope Specificity	21-100/127
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion inner membrane; Multi-pass membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	BRP44 is a 127 amino acid protein belonging to the UPF0041 family. The gene that encodes BRP44 maps to human chromosome 1, which 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.

Additional Information

Gene ID	25874
Other Names	Mitochondrial pyruvate carrier 2, Brain protein 44, MPC2, BRP44
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	MPC2
Synonyms	BRP44
Function	Mediates the uptake of pyruvate into mitochondria to maintain the balance between glycolysis and oxidative phosphorylation (PubMed: 22628558 , PubMed: 26253029 , PubMed: 27317664 , PubMed: 29472561 , PubMed: 40044865 , PubMed: 40101766 , PubMed: 35278701). Plays an essential role in cellular metabolism (PubMed: 40044865 , PubMed: 40101766).
Cellular Location	Mitochondrion inner membrane; Multi-pass membrane protein

Background

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