

EFR3B Rabbit pAb

EFR3B Rabbit pAb Catalog # AP55608

Product Information

Application IHC-P, IHC-F, IF

Primary Accession Q9Y2G0

Reactivity Pig, Mouse, Dog, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 92487
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human EFR3B

Epitope Specificity 21-120/817 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SIMILARITY Belongs to the EFR3 family.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions EFR3B (EFR3 homolog B) is an 817 amino acid protein that exists as three

alternatively spliced isoforms and belongs to the EFR3 family. The gene

encoding EFR3B maps to human chromosome 2p23.3 and mouse chromosome 12 A1.1. Human chromosome 2 is the second largest human

chromosome, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alstr鰉 syndrome, is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern

form today in apes.

Additional Information

Gene ID 22979

Other Names Protein EFR3 homolog B, EFR3B (<u>HGNC:29155</u>)

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

Protein Information

Name EFR3B (HGNC:29155)

Function Component of a complex required to localize phosphatidylinositol 4-kinase

(PI4K) to the plasma membrane (PubMed:<u>23229899</u>, PubMed:<u>25608530</u>, PubMed:<u>26571211</u>). The complex acts as a regulator of phosphatidylinositol 4-phosphate (PtdIns(4)P) synthesis (Probable). In the complex, EFR3B probably acts as the membrane-anchoring component (PubMed:<u>23229899</u>). Also involved in responsiveness to G-protein-coupled receptors; it is however

unclear whether this role is direct or indirect (PubMed:25380825).

Cellular Location Cell membrane; Lipid-anchor. Cytoplasm, cytosol. Note=Palmitoylation

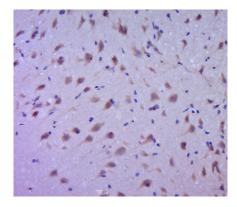
anchors the protein to the plasma membrane (PubMed:23229899, PubMed:25380825). A small amount is observed in the cytosol

(PubMed:25380825)

Background

EFR3B (EFR3 homolog B) is an 817 amino acid protein that exists as three alternatively spliced isoforms and belongs to the EFR3 family. The gene encoding EFR3B maps to human chromosome 2p23.3 and mouse chromosome 12 A1.1. Human chromosome 2 is the second largest human chromosome, which consists of 237 million bases, encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alstr鰉 syndrome, is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

Images



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EFR3B) Polyclonal Antibody, Unconjugated (AP55608) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

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