

#### **EFR3B Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55608

### **Specification**

# **EFR3B Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC

Primary Accession <u>Q9Y2G0</u>

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
92 KDa
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\[ \text{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.

### **EFR3B Polyclonal Antibody - Additional Information**

**Gene ID 22979** 

**Other Names** 

Protein EFR3 homolog B, EFR3B (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=29155" target=" blank">HGNC:29155</a>)



#### **Dilution**

- <span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
  ="dilution\_IHC-F">IHC-F~~N/A</span> <br \> <span class
  ="dilution\_IF">IF~~1:50~200</span> <br \> <span class = "dilution\_ICC">ICC~~N/A</span>
- **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### 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.

# **EFR3B Polyclonal Antibody - Protein Information**

Name EFR3B (<u>HGNC:29155</u>)

#### **Function**

Component of a complex required to localize phosphatidylinositol 4-kinase (PI4K) to the plasma membrane (PubMed:<a href="http://www.uniprot.org/citations/23229899" target="\_blank">23229899</a>, PubMed:<a href="http://www.uniprot.org/citations/25608530" target="\_blank">25608530</a>, PubMed:<a href="http://www.uniprot.org/citations/26571211" target="\_blank">26571211</a>). 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:<a href="http://www.uniprot.org/citations/23229899" target="\_blank">23229899</a>). Also involved in responsiveness to G-protein-coupled receptors; it is however unclear whether this role is direct or indirect (PubMed:<a href="http://www.uniprot.org/citations/25380825" target="\_blank">25380825</a>).

#### **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)

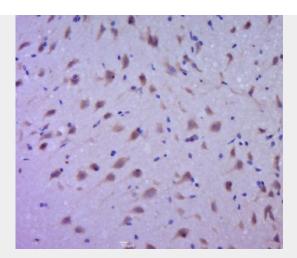
### **EFR3B Polyclonal Antibody - Protocols**

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

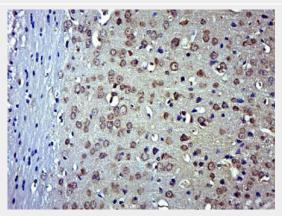
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### EFR3B Polyclonal Antibody - 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 (bs-14521R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); 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 (bs-14521R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.