

Product Information

Anti-PTPRF

produced in rabbit, IgG fraction of antiserum

Catalog Number: **SAB4200320**

Product Description

Anti-PTPRF is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal region of human PTPRF (Gene ID: 5792), conjugated to KLH. The corresponding sequence differs by two amino acids in mouse and rat. IgG fraction of antiserum is purified from whole antiserum using protein A immobilized on agarose.

Anti-PTPRF recognizes the extracellular subunits of human PTPRF. The antibody may be used in several immunochemical techniques including immunoblotting (~210, ~150 and ~139 kDa). Detection of the PTPRF bands by immunoblotting is specifically inhibited by the immunizing peptide.

PTPRF - protein tyrosine phosphatase, receptor type, F (also known as LAR, leukocyte antigen-related tyrosine phosphatase and leukocyte common antigen related) is a transmembrane protein tyrosine phosphatase (PTP). It consists of noncovalently bound subunits designated the E (extracellular) and P (phosphatase) subunits that are derived from a precursor protein by proteolytic processing. The E subunits (150 kDa) has 3 immunoglobulin-like domains and 8 fibronectin III-like domains, and the P subunits (85 kDa) has a short extracellular domain, a transmembrane segment, and tandem cytoplasmic PTP catalytic domains.^{1,2} PTPRF has been implicated in a number of signaling pathways, including cadherin complex stability and cell-cell association, axon guidance in the developing nervous system and insulin receptor signaling. Insulin receptor, EGF receptor, HGF receptor and RET have been reported as substrates of PTPRF.^{3,4}

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody dilution of 1:250-1:500 is recommended using lysates of HEK-293T cells over-expressing human PTPRF.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Steuli, M., et al., *EMBO J.*, **11**, 897-907 (1992).
2. Aicher, B., et al., *J. Cell. Biol.*, **138**, 681-696 (1997).
3. Kulas, D.T., *J. Biol. Chem.*, **271**, 748-754 (1996).
4. Qiao, S., et al., *J. Biol. Chem.*, **276**, 9460-9467 (2001).

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