



PLA2R1, Recombinant, Human, aa395-530, His-Tag (Secretory Phospholipase A2 Receptor)

Catalog number

374731

Supplier

United States Biological

Receptor for secretory phospholipase A2 (sPLA2). Acts as a receptor for phospholipase sPLA2-IB/PLA2G1B but not sPLA2-IIA/PLA2G2A. Also able to bind to snake PA2-like toxins. Although its precise function remains unclear, binding of sPLA2 to its receptor participates in both positive and negative regulation of sPLA2 functions as well as clearance of sPLA2. Binding of sPLA2-IB/PLA2G1B induces various effects depending on the cell type, such as activation of the mitogen-activated protein kinase (MAPK) cascade to induce cell proliferation, the production of lipid mediators, selective release of arachidonic acid in bone marrow-derived mast cells. In neutrophils, binding of sPLA2-IB/PLA2G1B can activate p38 MAPK to stimulate elastase release and cell adhesion. May be involved in responses in proinflammatory cytokine productions during endotoxic shock. Also has endocytic properties and rapidly internalizes sPLA2 ligands, which is particularly important for the clearance of Extracellular domain sPLA2s to protect their potent enzymatic activities. The soluble secretory phospholipase A2 receptor form is circulating and acts as a negative regulator of sPLA2 functions by blocking the biological functions of sPLA2-IB/PLA2G1B.

Source

Recombinant protein corresponding to aa395-530 from human PLA2R1, fused to His-Tag at N-terminal, expressed in Yeast.

Molecular Weight

~17.4kD

AA Sequence

EETWHEALRSCQADNSALIDITSLAEVEFLVTLGDNASETWIGLSSNKIPVSEWNSNDSSVIFTNWHLEPHIFPN
RSQLCVSAEQSEGHKVKNCERLFYICKKAGHVLSDAESGCQEGWERHGGFCYKID

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

Formulation

Supplied as a liquid in Tris-HCl, pH 8.0, 1mM EDTA, 50% glycerol.

Purity

≥90% (SDS-PAGE)

Grade

Purified

Storage

For in vitro research use only, not for human or veterinary diagnostic or medical use



-20°C

MW

17.4

Antigen Modification

Recombinant, Yeast

Reference

1. The human 180-kDa receptor for secretory phospholipases A2. Molecular cloning, identification of a secreted soluble form, expression, and chromosomal localization. Ancian P., Lambeau G., Mattei M.-G., Lazdunski M.J. Biol. Chem. 270:8963-8970(1995).