

Recombinant Protein Technical Manual Recombinant Mouse SMPDL3A Protein (His Tag)

RPES2204

Product Data:

Product SKU: RPES2204 **Size:** 20μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: NP 065586.3

Protein Information:

Molecular Mass: 49.1 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 0610010C24Rik;AI529588;ASM3A;ASML3;ASML3A

Immunogen Information:

Sequence: Met1-Leu445

Background:

SMPDL3A gene is a novel liver X receptor (LXR) -regulated gene, with an LXR response element within its promoter. The induction of SMPDL3A is LXR-dependent and is restricted to human blood cells with no induction observed in mouse cellular systems. LXR α and LXR β function as physiological sensors of cholesterol metabolites (oxysterols), regulating key genes involved in cholesterol and lipid metabolism. LXRs have been extensively studied in both human and rodent cell systems, revealing their potential therapeutic value in the contexts of atherosclerosis and inflammatory diseases. The LXR genome landscape has been investigated in murine macrophages but not in human THP cells, which represent one of the frequently used monocyte/macrophage cell systems to study immune responses.