

Screening Libraries

Proteins

Product Data Sheet

SCGB3A2 Protein, Mouse (His, GST)

Cat. No.: HY-P71605

Synonyms: Scgb3a2; Pnsp1; Ugrp1; Secretoglobin family 3A member 2; Pneumo secretory protein 1; PnSP-

1; Uteroglobin-related protein 1

Mouse Species: Source: E. coli

Accession: Q920H1-1 (L22-L139)

Gene ID: 117158

Molecular Weight: Approximately 42-43.2 kDa

PROPERTIES

AA Seq	uence
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LLINRLPVVD KLPVPLDDII PSFDPLKMLL KTLGISVEHL VTGLKKCVDE LGPEASEAVK KLLVIIICSY FPGRSLCYVN NLPSFVSVLF LPMICAYPRD SKKQTFAFIE RVFEQSKL

Biological Activity

Measured in a cytotoxicity assay using A549 cells in the presence of 0.5 μg/mL LPS (HY-D1056). The ED₅₀ of this effect is 0.5589 μg/mL, corresponding to a specific activity is 1.789×10³ units/mg.

Appearance

Lyophilized powder

Formulation

Lyophilized from a 0.2 µm sterile filtered PBS, 6-8% Trehalose, pH 7.4.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH₂O.

Storage & Stability

Stored at -20° C for 2 years. After reconstitution, it is stable at 4° C for 1 week or -20° C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

SCGB3A2 is a secreted cytokine-like protein that exhibits diverse functions, including binding to the scavenger receptor MARCO and interacting with various pathogens such as the Gram-positive bacterium L.monocytogenes, the Gram-negative bacterium P.aeruginosa, and yeast. Notably, it strongly inhibits phospholipase A2 (PLA2G1B) activity, showcasing its regulatory role in lipid metabolism. SCGB3A2 demonstrates anti-inflammatory effects in respiratory epithelium and exerts anti-fibrotic activity in the lung. It may contribute to fetal lung development and maturation, promoting branching morphogenesis during early stages of lung development. Additionally, in the pituitary, SCGB3A2 is implicated in inhibiting the production of follicle-stimulating hormone (FSH) and luteinizing hormone (LH). The protein exists as a homodimer,

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Caution: Product has not been fully validated for medical applications. For research use only.

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