# SANTA CRUZ BIOTECHNOLOGY, INC.

# UGRP1 (FL-93): sc-67182



BACKGROUND

Uteroglobin-related protein 1 (UGRP1) is a 93 amino acid secretory protein that is mainly expressed in lung Clara-like epithelial cells, with low levels of expression in the thyroid. The homodimeric UGRP1 may play an anti-inflammatory role in lung inflammation, though the mechanism is still unknown. A macrophage scavenger receptor with collagenous structure (MARCO) acts as a receptor for UGRP1 and may be involved in pathogen clearance in the lung. UGRP1 has a binding site for bacterial lipopolysaccharide (LPS). It is downregulated in antigen-induced inflamed airways, such as allergic asthma, but is upregulated in cystic fibrosis, and interleukin-9 and interleukin-5 modulate UGRP1 expression. UGRP1 may be a therapeutic candidate for treating various sources of lung inflammation.

### REFERENCES

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- Bin, L.H., et al. 2003. Identification of uteroglobin-related protein 1 and macrophage scavenger receptor with collagenous structure as a lung-specific ligand-receptor pair. J. Immunol. 171: 924-930.
- 4. Chiba, Y., et al. 2004. Decreased expression of uteroglobin-related protein 1 in inflamed mouse airways is mediated by IL-9. Am. J. Physiol. Lung Cell. Mol. Physiol. 287: L1193-L1198.
- 5. Chiba, Y., et al. 2004. Interleukin-5 reduces the expression of uteroglobinrelated protein (UGRP) 1 gene in allergic airway inflammation. Immunol. Lett. 97: 123-129.
- Srisodsai, A., et al. 2004. Interleukin-10 induces uteroglobin-related protein (UGRP) 1 gene expression in lung epithelial cells through homeodomain transcription factor T/EBP/NKX2.1. J. Biol. Chem. 279: 54358-54368.
- Batra, J., et al. 2005. Uteroglobin-related protein 1 (UGRP1) gene polymorphisms and atopic asthma in the Indian population. Int. Arch. Allergy Immunol. 136: 1-6.
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#### CHROMOSOMAL LOCATION

Genetic locus: SCGB3A2 (human) mapping to 5q32; Scgb3a2 (mouse) mapping to 18 B3.

## SOURCE

UGRP1 (FL-93) is a rabbit polyclonal antibody raised against amino acids 22-93 mapping at the C-terminus of UGRP1 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

UGRP1 (FL-93) is recommended for detection of UGRP1 of human, rat and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with UGRP2.

UGRP1 (FL-93) is also recommended for detection of UGRP1 in additional species, including equine and porcine.

Suitable for use as control antibody for UGRP1 siRNA (h): sc-61754, UGRP1 siRNA (m): sc-61755, UGRP1 shRNA Plasmid (h): sc-61754-SH, UGRP1 shRNA Plasmid (m): sc-61755-SH, UGRP1 shRNA (h) Lentiviral Particles: sc-61754-V and UGRP1 shRNA (m) Lentiviral Particles: sc-61755-V.

Molecular Weight of UGRP1: 14 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try **UGRP1 (1B2): sc-517117**, our highly recommended monoclonal alternative to UGRP1 (FL-93).