



# Uroguanylin (H-108): sc-67138

## BACKGROUND

The family of guanylin regulatory peptides, including guanylin and Uroguanylin, are strongly expressed in intestinal mucosa and regulate intestinal fluid secretion during digestion. Guanylins are also involved in acid neutralization and the regulation of membrane-bound guanylate cyclase signaling molecules. Guanylin and Uroguanylin are secreted primarily in the stomach, intestine and colon. Uroguanylin is an endogenous activator of intestinal guanylate cyclase. It is a paracrine and/or autocrine regulator of intestinal water and salt transport. Uroguanylin stimulates intestinal guanylate cyclase through the same receptor binding region as the heat-stable enterotoxins. Uroguanylin is involved in the regulation of intestinal fluid and electrolyte transport.

## REFERENCES

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2. Hess, R., et al. 1995. GCAP-II: isolation and characterization of the circulating form of human Uroguanylin. *FEBS Lett.* 374: 34-38.
3. Hill, O., et al. 1995. A new human guanylate cyclase-activating peptide (GCAP-II, Uroguanylin): precursor cDNA and colonic expression. *Biochim. Biophys. Acta* 1253: 146-149.
4. Miyazato, M., et al. 1996. Cloning and characterization of a cDNA encoding a precursor for human Uroguanylin. *Biochem. Biophys. Res. Commun.* 219: 644-648.
5. Marx, U.C., et al. 1998. One peptide, two topologies: structure and inter-conversion dynamics of human Uroguanylin isomers. *J. Pept. Res.* 52: 229-240.
6. Forte, L.R., et al. 2000. Guanylin peptides: renal actions mediated by cyclic GMP. *Am. J. Physiol. Renal Physiol.* 278: F180-191.
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## CHROMOSOMAL LOCATION

Genetic locus: GUCA2B (human) mapping to 1p34-p33; Guca2b (mouse) mapping to 4 D2.1.

## SOURCE

Uroguanylin (H-108) is a rabbit polyclonal antibody raised against amino acids 1-108 mapping at the N-terminus of Uroguanylin of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Uroguanylin (H-108) is recommended for detection of Uroguanylin of human 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).

Suitable for use as control antibody for Uroguanylin siRNA (h): sc-44592.

Molecular Weight of Uroguanylin: 12 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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ 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™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.