

## urocortin (R-20): sc-1825

### BACKGROUND

Urocortins 1, 2 and 3 are the mammalian homologs of fish urotensin I. Mammalian urocortin is a member of the corticotropin-releasing hormone (CRH) family that is expressed in a region of the rat midbrain. The distinct expression pattern in discrete brain regions suggests that it influences such behavior as feeding, anxiety, and auditory processing. Synthetic human urocortin binds with high affinity to CRH receptors and acts *in vitro* to release ACTH from dispersed rat anterior pituitary cells. It is suggested that urocortin may be an endogenous CRF-like factor in the brain responsible for the effects of stress on appetite. The gene which encodes urocortin maps to human chromosome 2. Specifically, urocortin III is a specific ligand for CRF type 2 receptor which mediates stress-coping responses. Human urocortin I and III are expressed in the human heart. Urocortin III is also expressed in the pituitary gland, adrenal gland, GI tract, ovary, spleen, brain and kidney.

### CHROMOSOMAL LOCATION

Genetic locus: UCN (human) mapping to 2p23.3; Ucn (mouse) mapping to 5 B1.

### SOURCE

urocortin (R-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of urocortin of rat origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-1825 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

urocortin (R-20) is recommended for detection of urocortin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

urocortin (R-20) is also recommended for detection of urocortin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for urocortin siRNA (h): sc-39399, urocortin siRNA (m): sc-39400, urocortin shRNA Plasmid (h): sc-39399-SH, urocortin shRNA Plasmid (m): sc-39400-SH, urocortin shRNA (h) Lentiviral Particles: sc-39399-V and urocortin shRNA (m) Lentiviral Particles: sc-39400-V.

Positive Controls: Mouse embryo extract: sc-364239.

### RESEARCH USE

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

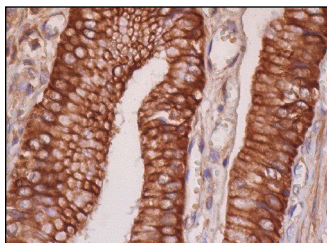
### PROTOCOLS

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

### STORAGE

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

### DATA



urocortin Antibody (R-20): sc-1825. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane and cytoplasmic staining of glandular cells.

### SELECT PRODUCT CITATIONS

- Slominski, A., et al. 2000. The skin produces urocortin. *J. Clin. Endocrinol. Metab.* 85: 815-823.
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- Rouvette, T., et al. 2011. Differential responses of corticotropin-releasing factor and urocortin 1 to acute pain stress in the rat brain. *Neuroscience* 183: 15-24.
- Sterrenburg, L., et al. 2011. Acute ether stress differentially affects corticotropin-releasing factor and urocortin 1 in the Brattleboro rat. *Brain Res.* 1398: 21-29.
- Xu, L., et al. 2011. Leptin signaling modulates the activity of urocortin 1 neurons in the mouse nonpreganglionic Edinger-Westphal nucleus. *Endocrinology* 152: 979-988.
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