

## HE6 (S-17): sc-69492

### BACKGROUND

G protein-coupled receptors (GPRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, comprise a superfamily of proteins that play a role in many different stimulus-response pathways. G protein-coupled receptors translate extracellular signals into intracellular signals (G protein activation) and they respond to a variety of signaling molecules, such as hormones and neurotransmitters. HE6, also known as GPR64 (G protein-coupled receptor 64) or TM7LN2, is a 1,017 amino acid multi-pass membrane protein that contains one GPS domain and belongs to the G protein-coupled receptor family. Expressed specifically in the epididymis, HE6 exists as a heterodimer that is thought to be involved in signal transduction pathways that regulate male fertility and epididymal function. Multiple isoforms of HE6 exist due to alternative splicing events.

### REFERENCES

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- Obermann, H., et al. 2003. HE6, a two-subunit heptahelical receptor associated with apical membranes of efferent and epididymal duct epithelia. *Mol. Reprod. Dev.* 64: 13-26.
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- Davies, B., et al. 2007. Novel epididymis-specific mRNAs downregulated by HE6/Gpr64 receptor gene disruption. *Mol. Reprod. Dev.* 74: 539-553.
- Kirchhoff, C., et al. 2008. HE6/GPR64 adhesion receptor co-localizes with apical and subapical F-actin scaffold in male excurrent duct epithelia. *Reproduction* 136: 235-245.

### CHROMOSOMAL LOCATION

Genetic locus: GPR64 (human) mapping to Xp22.13; Gpr64 (mouse) mapping to X F4.

### SOURCE

HE6 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of HE6 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.

Blocking peptide available for competition studies, sc-69492 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

HE6 (S-17) is recommended for detection of HE6 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HE6 (S-17) is also recommended for detection of HE6 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for HE6 siRNA (h): sc-75235, HE6 siRNA (m): sc-75236, HE6 shRNA Plasmid (h): sc-75235-SH, HE6 shRNA Plasmid (m): sc-75236-SH, HE6 shRNA (h) Lentiviral Particles: sc-75235-V and HE6 shRNA (m) Lentiviral Particles: sc-75236-V.

Molecular Weight of HE6: 180 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ 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](http://www.scbt.com) or our catalog for detailed protocols and support products.