

# Lipocalin-8 (E-12): sc-107238

## BACKGROUND

The lipocalin family is composed of structurally conserved hydrophobic ligand-binding proteins and is represented in all major taxonomic groups from prokaryotes to primates. Members of the lipocalin family are characterized by several common molecular-recognition properties: the ability to bind a range of small hydrophobic molecules, binding to specific cell-surface receptors and the formation of complexes with soluble macromolecules. Lipocalin-8, also known as LCN8, is a 175 amino acid protein that is predominantly expressed in epididymis, where it is thought to regulate epididymis-specific gene expression. Belonging to the calycin superfamily, Lipocalin-8 may play a role in sperm maturation. The gene encoding Lipocalin-8 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

## REFERENCES

1. Flower, D.R. 1995. Multiple molecular recognition properties of the lipocalin protein family. *J. Mol. Recognit.* 8: 185-195.
2. Flower, D.R. 1996. The lipocalin protein family: structure and function. *Biochem. J.* 318: 1-14.
3. Suzuki, K., et al. 2004. Molecular evolution of epididymal lipocalin genes localized on mouse chromosome 2. *Gene* 339: 49-59.
4. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
5. Grzyb, J., et al. 2006. Lipocalins-a family portrait. *J. Plant Physiol.* 163: 895-915.
6. Suzuki, K., et al. 2007. Epididymis-specific lipocalin promoters. *Asian J. Androl.* 9: 515-521.

## CHROMOSOMAL LOCATION

Genetic locus: LCN8 (human) mapping to 9q34.3; Lcn8 (mouse) mapping to 2 A3.

## SOURCE

Lipocalin-8 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Lipocalin-8 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-107238 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

Lipocalin-8 (E-12) is recommended for detection of Lipocalin-8 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); non cross-reactive with other Lipocalin family members.

Lipocalin-8 (E-12) is also recommended for detection of Lipocalin-8 in additional species, including equine.

Suitable for use as control antibody for Lipocalin-8 siRNA (h): sc-92617, Lipocalin-8 siRNA (m): sc-146752, Lipocalin-8 shRNA Plasmid (h): sc-92617-SH, Lipocalin-8 shRNA Plasmid (m): sc-146752-SH, Lipocalin-8 shRNA (h) Lentiviral Particles: sc-92617-V and Lipocalin-8 shRNA (m) Lentiviral Particles: sc-146752-V.

Molecular Weight of Lipocalin-8: 19 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.

## PROTOCOLS

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