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# Goat Anti-SEMA3E Antibody

**Peptide-affinity purified goat antibody**
**Catalog # AF1967a**

## Specification

### Goat Anti-SEMA3E Antibody - Product Information

| | |
|---|---|
| Application | **IHC** |
| Primary Accession | O15041 |
| Other Accession | NP_036563, 9723 |
| Reactivity | **Human** |
| Host | **Goat** |
| Clonality | **Polyclonal** |
| Concentration | **100ug/200ul** |
| Isotype | **IgG** |
| Calculated MW | **89228** |

### Goat Anti-SEMA3E Antibody - Additional Information

**Gene ID** 9723

**Other Names**
Semaphorin-3E, SEMA3E, KIAA0331, SEMAH

**Format**
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
Goat Anti-SEMA3E Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-SEMA3E Antibody - Protein Information

**Name** SEMA3E

**Synonyms** KIAA0331, SEMAH

**Function**
Plays an important role in signaling via the cell surface receptor PLXND1. Mediates reorganization of the actin cytoskeleton, leading to the retraction of cell projections. Promotes focal adhesion disassembly and inhibits adhesion of endothelial cells to the extracellular matrix. Regulates angiogenesis, both during embryogenesis and after birth. Can down-regulate sprouting angiogenesis. Required for normal vascular patterning during embryogenesis. Plays an important

role in ensuring the specificity of synapse formation (By similarity).

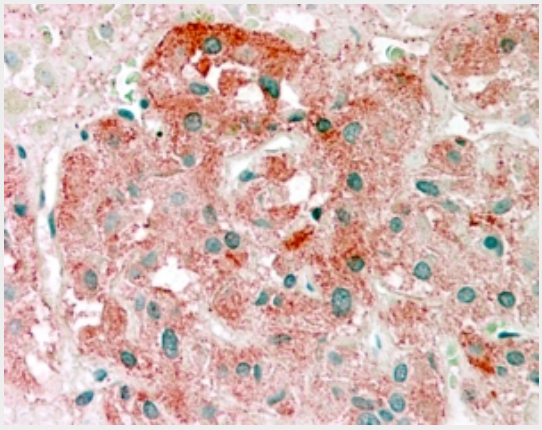
**Cellular Location**
Secreted.

## Goat Anti-SEMA3E Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Goat Anti-SEMA3E Antibody - Images



AF1967a (2.5 µg/ml) staining of paraffin embedded Human Adrenal Gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

## Goat Anti-SEMA3E Antibody - Background

Semaphorins are a large family of conserved secreted and membrane associated proteins which possess a semaphorin (Sema) domain and a PSI domain (found in plexins, semaphorins and integrins) in the N-terminal extracellular portion. Based on sequence and structural similarities, semaphorins are put into eight classes: invertebrates contain classes 1 and 2, viruses have class V, and vertebrates contain classes 3-7. Semaphorins serve as axon guidance ligands via multimeric receptor complexes, some (if not all) containing plexin proteins. This gene encodes a class 4 semaphorin. This gene encodes a class 3 semaphorin. Multiple transcript variants encoding different isoforms have been found for this gene.

## Goat Anti-SEMA3E Antibody - References

Sema3E-Plexin D1 signaling drives human cancer cell invasiveness and metastatic spreading in mice. Casazza A, et al. J Clin Invest, 2010 Aug 2. PMID 20664171.
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Association of polymorphisms in the SLIT2 axonal guidance gene with anger in suicide attempters. Sokolowski M, et al. Mol Psychiatry, 2010 Jan. PMID 20029409.
Semaphorin 3E expression correlates inversely with Plexin D1 during tumor progression. Roodink I, et al. Am J Pathol, 2008 Dec. PMID 18974298.
Successful inhibition of tumor development by specific class-3 semaphorins is associated with expression of appropriate semaphorin receptors by tumor cells. Kigel B, et al. PLoS One, 2008 Sep 26. PMID 18818766.