

**EphA3 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7608a****Specification****EphA3 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P29320](#)**EphA3 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 2042**Other Names**

Ephrin type-A receptor 3, EPH-like kinase 4, EK4, hEK4, HEK, Human embryo kinase, Tyrosine-protein kinase TYRO4, Tyrosine-protein kinase receptor ETK1, Eph-like tyrosine kinase 1, EPHA3, ETK, ETK1, HEK, TYRO4

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [<a href=/product/products/AP7608a>AP7608a</a>](#) was selected from the N-term region of human EphA3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**EphA3 Antibody (N-term) Blocking Peptide - Protein Information****EphA3 Antibody (N-term) Blocking Peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

**EphA3 Antibody (N-term) Blocking Peptide - References**

Chiari, R., et al., Cancer Res. 60(17):4855-4863 (2000). Wicks, I.P., et al., Proc. Natl. Acad. Sci. U.S.A. 89(5):1611-1615 (1992). Boyd, A.W., et al., J. Biol. Chem. 267(5):3262-3267 (1992).

**Name** EPHA3

**Synonyms** ETK, ETK1, HEK, TYRO4

**Function**

Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin family ligands residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling. Highly promiscuous for ephrin-A ligands it binds preferentially EFNA5. Upon activation by EFNA5 regulates cell-cell adhesion, cytoskeletal organization and cell migration. Plays a role in cardiac cells migration and differentiation and regulates the formation of the atrioventricular canal and septum during development probably through activation by EFNA1. Involved in the retinotectal mapping of neurons. May also control the segregation but not the guidance of motor and sensory axons during neuromuscular circuit development.

**Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type I membrane protein

**Tissue Location**

Widely expressed. Highest level in placenta.

**EphA3 Antibody (N-term) Blocking Peptide  
- Protocols**

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

- [Blocking Peptides](#)