

**EphA7 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7612d****Specification**

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**EphA7 Antibody - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">Q15375</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	112097

**EphA7 Antibody - Additional Information****Gene ID** 2045**Other Names**

Ephrin type-A receptor 7, EPH homology kinase 3, EHK-3, EPH-like kinase 11, EK11, hEK11, EPHA7, EHK3, HEK11

**Target/Specificity**

This EphA7 antibody is generated from rabbits immunized with recombinant human EphA7 protein.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

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

**Precautions**

EphA7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**EphA7 Antibody - Protein Information****Name** EPHA7**Synonyms** EHK3, HEK11

**Function** Receptor tyrosine kinase which binds promiscuously GPI- anchored ephrin-A 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. Among GPI-anchored ephrin-A ligands, EFNA5 is a cognate/functional ligand for EPHA7 and their interaction regulates brain development modulating cell-cell adhesion and repulsion. Has a repellent activity on axons and is for instance involved in the guidance of corticothalamic axons and in the proper topographic mapping of retinal axons to the colliculus. May also regulate brain development through a caspase(CASP3)-dependent proapoptotic activity. Forward signaling may result in activation of components of the ERK signaling pathway including MAP2K1, MAP2K2, MAPK1 and MAPK3 which are phosphorylated upon activation of EPHA7.

**Cellular Location**

Cell membrane; Single-pass type I membrane protein

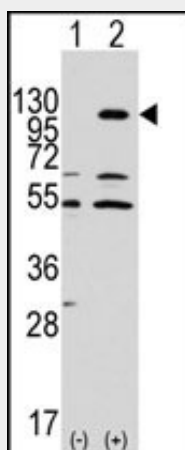
**Tissue Location**

Widely expressed.

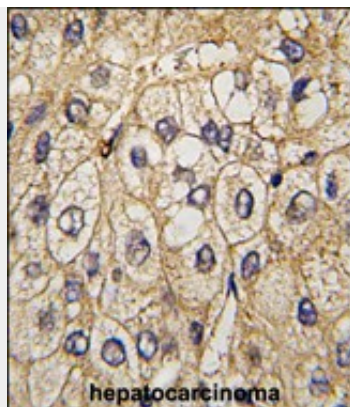
**EphA7 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**EphA7 Antibody - Images**

Western blot analysis of EphA7 (arrow) using rabbit polyclonal EphA7 Antibody (Cat.#AP7612d).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the EphA7 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with EphA7 antibody (Cat.#AP7612d), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

### **EphA7 Antibody - Background**

EphA7 belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands.[1]

### **EphA7 Antibody - References**

Wilkinson, D.G., Nat Rev Neurosci 2(3):155-164 (2001). Xu, Q., et al., Philos. Trans. R. Soc. Lond., B, Biol. Sci. 355(1399):993-1002 (2000). Holder, N., et al., Development 126(10):2033-2044 (1999). Zhou, R., Pharmacol. Ther. 77(3):151-181 (1998). Fox, G.M., et al., Oncogene 10(5):897-905 (1995).