

Human Ephrin-A5 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF3743

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human Ephrin-A5 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant mouse (rm) Ephrin-A1, rmEphrin-A2, recombinant human (rh) Ephrin-A3, rhEphrin-A4, rhEphrin-B3, rmEphrin-A4, rmEphrin-B1 and rmEphrin-B2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Ephrin-A5 Gln21-Asn203 Accession # P52803
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

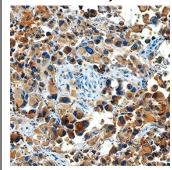
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 μg/mL	Recombinant Human Ephrin-A5 Fc Chimera (Catalog # 374-EA)
Immunohistochemistry	5-15 μg/mL	See Below

DATA

Immunohistochemistry



Ephrin-A5 in Human Melanoma. Ephrin-A5 was detected in immersion fixed paraffinembedded sections of human melanoma using Goat Anti-Human Ephrin-A5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3743) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE			
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.		
	 12 months from date of receipt, -20 to -70 °C as supplied. 		
	 1 month, 2 to 8 °C under sterile conditions after reconstitution. 		
	6 months -20 to -70 °C under sterile conditions after reconstitution		

BACKGROUND

Ephrin-A5, also known as AL-1, RAGS, LERK-7, and EFL-5 (1), is a member of the ephrin ligand family which binds members of the Eph receptor family. All ligands share a conserved extracellular sequence, which most likely corresponds to the receptor binding domain. This conserved sequence consists of approximately 125 amino acids and includes four invariant cysteines. The A-class ligands have a GPI anchor following the conserved sequence. Ephrin-A5 has been shown to bind EphA2, EphA3, EphA4, EphA5, EphA6, EphA7, and EphA8 (2, 3). The extracellular domains of murine and human Ephrin-A5 share 99% amino acid identity. Only membrane-bound or Fc-clustered ligands are capable of activating the receptor *in vitro*. While soluble monomeric ligands bind the receptor, they do not induce receptor autophosphorylation and activation (2). *In vivo*, the ligands and receptors display reciprocal expression (3). It has been found that nearly all the receptors and ligands are expressed in developing and adult neural tissue (3). The ephrin/Eph families also appear to play a role in angiogenesis (3).

References:

- 1. Eph Nomenclature Committee [letter] (1997) Cell 90:403.
- 2. Flanagan, J.G. and P. Vanderhaeghen (1998) Annu. Rev. Neurosci. 21:309.
- 3. Pasquale, E.B. (1997) Curr. Opin. Cell Biol. 9:608.

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