Datasheet for ABIN2746576

anti-EPH Receptor A7 antibody (Isoform 1, Precursor)

Go to Product page

Overview

Quantity:	100 µg
Target:	EPH Receptor A7 (EPHA7)
Binding Specificity:	Isoform 1, Precursor
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Immunogen:	Synthetic peptide corresponding to unique amino acid sequences on human Ephrin type-A receptor 7 isoform 1 precursor protein.
Isotype:	IgG
Cross-Reactivity:	Rat (Rattus), Mouse (Murine)
Cross-Reactivity (Details):	The antibody does not cross react to any other cellular protein.
Characteristics:	EphAR7 selective antibodies were generated against a peptide taken from the human protein. The EphAR7-selective antibodies are affinity purified on an immobilized antigen based affinity matrix, the isolated antibodies were then stabilized in antibody stabilization buffer for long-term storage. The EphAR7-selective antibodies are fully characterized for applications in western blotting and ELISA at the recommended dilutions. The Supplier provides EphA7 Western blot positive control samples in SDS-PAGE sample buffer.
Purification:	Affinity Purified

Target Details

Target:	EPH Receptor A7 (EPHA7)
Alternative Name:	Ephrin Receptor A7 (EPHA7 Products)
Background:	The Ephrin receptors represent the largest group of Receptor Tyrosine Kinases, comprising of 14 members and divided in two subclasses (class A & B ephrin ligands) based on their abilities to bind and activate each other, and on sequence conservation. Ephrin-A (EFNA) class is anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) classes are trans-membrane proteins. The Eph family of receptors are similarly divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Ephrins interact with a variety of membrane receptors that respond to chemokines, neurotransmitters or growth factors. Eph receptors are involved in central nervous system function and development, and in the modulation of different types of nociception. Eph receptors and their ligands play important roles in the regulation of cancer cell migration and invasion and are key regulators of axon guidance. They function in a variety of signaling modes by transducing signals from the cell exterior to the interior through ligand-induced activation of their kinase domain. Ephrin A7, a member of the ephrin family, encodes a soluble splice variant that acts as an extrinsic tumor suppressor. The common deletion of chromosome 6q has identified the ephrin receptor A7 (EPHA7) as a tumor suppressor in lymphomas. EPHA7 is implicated in lung cancer and other tumors, because of a broader therapeutic potential for antibody-mediated delivery of this tumor suppressor for cancer therapy. EPHA7 interferes with another Eph-receptor and blocks oncogenic signals in lymphoma cells. Consistent with this drug-like activity, administration of the purified EPHA7 protein produces antitumor effects against xenografted human lymphomas. Fusing EPHA7 to the anti-CD20 antibody (rituximab) can directly target this tumor suppressor to lymphomas in vivo thus rendering EPHA7 as tumor suppressor with immediate therapeutic potential. EPH and EPH-related receptors are 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 gene for EphAR6 is present on chromosome 3q11.2.
NCBI Accession:	NP_004431
UniProt:	Q15375
Pathways:	RTK Signaling

Application Details

Application Notes:	Antibodies were tested in ELISA and western blotting applications at 1:500 dilution using ABIN1686566 samples. Antibody dilutions for these antibodies are for reference only, investigators are expected to determine the optimal conditions. Application of this antibody in other protocols has not yet tested. WB: > 1:500 IMM & IP pull-down assays: n.d. IHC: n.d. Investigators using this antibody in protocols other than listed above can request a complimentary sample of this antibody. n.d. not necessarily means the antibody is not suitable for that application, it simply means we have not yet characterized the antibody for that application. The antibody labels a strong band of EphAR7 at 120 kDa in ABIN1686566 samples and in other cancer cell lines.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.55-0.75 µg/µL
Storage:	-20 °C
Storage Comment:	Storage of very dilute antibody solutions is not recommended.