ARG82511
Rat EphA4 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82511-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82511-002	Standard	2 X 10 ng/vial	4°C
ARG82511-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82511-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82511-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82511-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82511-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82511-008	25X Wash buffer	20 ml	4°C
ARG82511-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82511-010	STOP solution	10 ml (Ready to use)	4°C
ARG82511-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82511 Rat EphA4 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat EphA4 in serum, plasma (EDTA, heparin) and cell culture supernatants.
Tested Reactivity	Rat
Tested Application	ELISA
Target Name	EphA4
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	15.6 pg/ml
Sample Type	Serum, plasma (EDTA, heparin) and cell culture supernatants.
Standard Range	31.2 - 2000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 4.8% Inter-Assay CV: 6.7%

Alternate Names	EC 2.7.10.1; Tyrosine-protein kinase receptor SEK; HEK8; SEK; hEK8; Tyrosine-protein kinase TYRO1; Ephrin type-A receptor 4; EK8; EPH-like kinase 8; TYRO1

Application Instructions

Assay Time	~ 5 hours

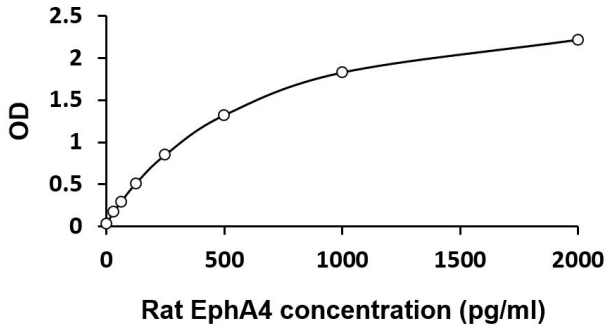
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	EPHA4
Gene Full Name	EPH receptor A4
Background	This gene 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. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2015]
Function	Receptor tyrosine kinase which binds 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, it has the unique property among Eph receptors to bind and to be physiologically activated by both GPI-anchored ephrin-A and transmembrane ephrin-B ligands including EFNA1 and EFNB3. Upon activation by ephrin ligands, modulates cell morphology and integrin-dependent cell adhesion through regulation of the Rac, Rap and Rho GTPases activity. Plays an important role in the development of the nervous system controlling different steps of axonal guidance including the establishment of the corticospinal projections. May also control the segregation of motor and sensory axons during neuromuscular circuit development. In addition to its role in axonal guidance plays a role in synaptic plasticity. Activated by EFNA1 phosphorylates CDK5 at 'Tyr-15' which in turn phosphorylates NGEF regulating RHOA and dendritic spine morphogenesis. In the nervous system, plays also a role in repair after injury preventing axonal regeneration and in angiogenesis playing a role in central nervous system vascular formation. Additionally, its promiscuity makes it available to participate in a variety of cell-cell signaling regulating for instance the development of the thymic epithelium. [UniProt]
Highlight	Related products: EphA antibodies; EphA ELISA Kits; New ELISA data calculation tool: Simplify the ELISA analysis by GainData
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Cell projection, axon. Cell projection, dendrite. Cell junction, synapse, postsynaptic cell membrane, postsynaptic density. Early endosome. Note=Clustered upon activation and targeted to early endosome. [UniProt]

Images



ARG82511 Rat EphA4 ELISA Kit standard curve image

ARG82511 Rat EphA4 ELISA Kit results of a typical standard run with optical density reading at 450 nm.