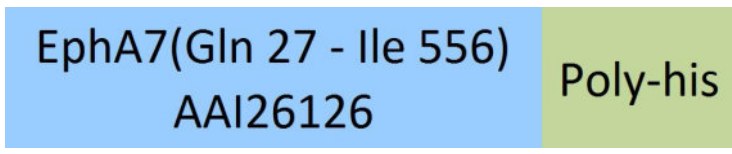
Synonym

EPHA7,EHK3,HEK11,hEK11

Source

Human EphA7, His Tag (EP7-H5221) is expressed from human 293 cells (HEK293). It contains AA Gln 27 - Ile 556 (Accession # AAI26126). Predicted N-terminus: Gln 27

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 60.2 kDa. The protein migrates as 70-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>98% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

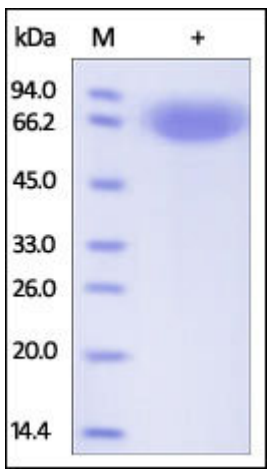
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human EphA7, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 98%.

Background

Ephrin type-A receptor 7 (EPHA7) is also known as EPH homology kinase 3 (EHK3), EPH-like kinase 11 (HEK11), which belongs to the protein kinase superfamily or tyr protein kinase family or ephrin receptor subfamily. EPHA7 / EHK3 contains 1 Eph LBD (Eph ligand-binding) domain, 2 fibronectin type-III domains, 1 protein kinase domain, 1 SAM (sterile alpha motif) domain. EHK-3 / EPHA7 is widely expressed. The catalytic activity of EPHA7 / EHK3 is “ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate”. 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.

References

(1) Nakanishi H., et al., 2007, Proc. Natl. Acad. Sci. U.S.A. 104:14442-14447.

(2) Tsuboi M., et al., 2010, Int. J. Oncol. 36:635-640.

(3) Eph nomenclature committee, 1997, Cell 90:403-404.

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.