

PPH311 PODS[®] Human Ephrin-A3

Description

The product contains the polyhedrin protein co-crystallized with Human Ephrin-A3. Ephrin-A3 is a member of Ephrin-A family, and it is also known as EHK1-L, EFL-2, and LERK-3. Ephrin-A ligands are structurally related to the extracellular domains of the transmembrane Ephrin-B ligands. Eph-Ephrin interactions are widely involved in the regulation of cell migration, tissue morphogenesis, and cancer progression. Ephrin-A3 expression can be up- or down-regulated by hypoxia in the hippocampus or vascular endothelial cells, respectively. Ephrin-A3 interaction with EphA receptors induces neurite growth cone collapse and the repulsion of migrating axons, which is important for the accurate migration of axons during CNS development.

Length	253 aa
Molecular Weight	28.7 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	AAA52368

Usage Recommendation

PODS[®] co-crystals provide a depot of proteins which are steadily secreted. It has been estimated that the biological activity of 50 million PODS[®] co-crystals generates the same peak dose as 3.3 µg of standard recombinant protein. However, at 5 days following the start of seeding the PODS[®] co-crystals, there are more than 50% of these peak levels still present in the culture system. Ultimately, the amount of PODS[®] co-crystals that is optimal for a particular experiment should be determined empirically. Based on previous data, we suggest using 50 million PODS[®] co-crystals in place of 3.3 µg of standard growth factor as a starting point. To control for cross-reactivity with cells or as a negative control, we recommend using PODS[®] growth factors alongside [PODS[®] Empty crystals](http://www.cellgs.com/products/podsand8482-empty.html), as the latter do not contain or release cargo protein.

Specifications

Alternative Names	EphrinA3, EFL2, EFL-2, EFNA3, EHK1-L, EPH-related receptor tyrosine kinase ligand 3, EPLG3EHK1 ligand, LERK-3, LERK3, ligand of eph-related kinase 3
Endotoxin Level	<0.06 EU/ml as measured by gel clot LAL assay
Formulation	PODS [®] were lyophilized from a volatile solution
AA Sequence	MADVAGTSNR DFRGREQRLF NSEQYNNNS KNSRPSTSLY KKAGFNHRAV YWNSSNQHLR REGYTVQVNV NDYLDIYCPH YNSSGVGPGA GPGPGGGAEQ YVLYMVS RNG YRTCNASQGF KRWECNRPHA PHSPIKFSEK FQRYSAFSLG YEFHAGHEY YISTPTHNLH WKCLRMKV FV CCASTSHSGE KPVPTLPQFT MGPVVKINVL EDFEGENPQV PKLEKSISGT SPKREHLPLA VGIAFFLMTF LAS

Preparation and Storage

Reconstitution	PODS [®] co-crystals may be reconstituted at 200 million co-crystals/ml in water. 20% glucose has a buoyant density closer to PODS [®] co-crystals and can be useful for aliquoting. PODS [®] co-crystals are highly stable when stored in aqueous solution (pH range 6 - 8).
Stability and Storage	Upon receipt, store at 4°C. PODS [®] co-crystals are stable for at least 1 year when dry and 6 months when resuspended.

