

PPH19 PODS® Human RANK Ligand

Description

The product contains the polyhedrin protein co-crystallized with Human RANK Ligand. Receptor activator of nuclear factor kappa-B Ligand (RANK Ligand) is a cell-bound marker related to the Tumor Necrosis Factor (TNF) family of proteins. RANK Ligand plays a critical role in bone metabolism and osteoclast differentiation. T cell expression of RANK Ligand promotes dendritic cell maturation.

Length	221 aa
Molecular Weight	25 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	O14788

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	Receptor activator of nuclear factor kappa-B Ligand, RANKL, RANK-L, RANK-ligand, TNFSF11, TRANCE, OPGL, ODF
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 NSEQYNYNNS KNSRPSTSLY KKAGYMEKAM VDGSWLDLAK RSKLEAQPPA HLTINATDIP SGSHKVSLSL WYHDRGWGKI SNMTFSNGKL IVNQDGFYYL YANICFRHHE TSGDLATEYL QLMVYVTKTS IKIPSSHTLM KGGSTKYWSG NSEFHFYSIN VGGFFKLRSG EEISIEVSNP SLLDPDQDAT YFGAFKVRDI D

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.