

PPH25 PODS[®] Human CD40 Ligand

Description

The product contains the polyhedrin protein co-crystallized with Human CD40 Ligand. CD40 Ligand is a membrane glycoprotein and differentiation antigen that is expressed on the surface of T cells, monocytes, basophils, eosinophils, platelets, dendritic cells, and endothelial cells. CD40 Ligand binds and activates the CD40 receptor on antigen-presenting cells. CD40 Ligand stimulates B cell proliferation, immunoglobulin class switching, and antibody secretion. CD40 Ligand also induces cytokine production and tumoricidal activity in peripheral blood monocytes. CD40 Ligand is a co-stimulator of activated T cell proliferation and inflammatory protein production.

Length	193 aa
Molecular Weight	42.4 kDa
Source	<i>Spodoptera frugiperda (Sf9) cell culture</i>
Accession Number	P29965

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	CD40 antigen ligand, CD40L, CD40-L, TNFSF5, TRAP, CD154, CD154 antigen, gp39, T-cell antigen Gp39, T-BAM, IGM, TRAP, HIGM1, IMD3, tumor necrosis factor ligand superfamily member 5, T-B cell-activating molecule, TNF-related activation protein
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 KKAGFQKGDQ NPQIAAHVIS EASSKTTSVL QWAEKGYTMSNNLVTLENG KQLTVKRQGL YYIYAQVTFC SNREASSQAP FIASLCLKSP GRFERILLRA ANTHSSAKPC GQQSIHLGGV FELQPGASVF VNVTDPSQVS HGTGFTSFGL LKL

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.

