


## Human CD3E protein, Fc tag (Animal-Free)

Cat #: PRP2029

Size: 10 µg/50 µg/100 µg/1 mg

### Product Information

	<b>Product Name:</b> Human CD3E protein, Fc tag (Animal-Free)		
<b>REF</b>	<b>Catalog Number:</b> PRP2029	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> >95% as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> HEK 293 Cells
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** CD3E is a one-way type I membrane glycoprotein on the surface of t cells. As a Part of the TCR-CD3 complex present on T-lymphocyte cell surface, CD3E plays an essential role in adaptive immune response. CD3E contains one Ig-like domain and one ITAM domain. CD3E together with CD3-gamma, CD3-delta and CD3-zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. This complex plays an important role in coupling antigen recognition with a variety of intracellular signal transduction pathways. Polypeptides play an important role in T cell development. CD3E molecules play a crucial role in T cell development, and CD3e gene deficiency can lead to severe immune deficiency. The CD3E gene is also associated with a woman's susceptibility to type 1 diabetes. CD3E has been shown to interact with TOP2B, CD3EAP and NCK2. The CD3 co-receptor complex is essential for signal transduction after specific binding of the T-cell receptor (TCR).

**Sequence:** Amino acid sequence derived from human CD3E protein (P07766, Asp 23-Asp 126) was expressed with the Fc region of human IgG1 at the C-terminus.

**Protein length:** The recombinant human CD3E protein consists of 335 amino acids and predicts a molecular mass of 38 kD. The apparent molecular mass of the human CD3E is approximately 40-50 kDa in SDS-PAGE under reducing conditions due to glycosylation.

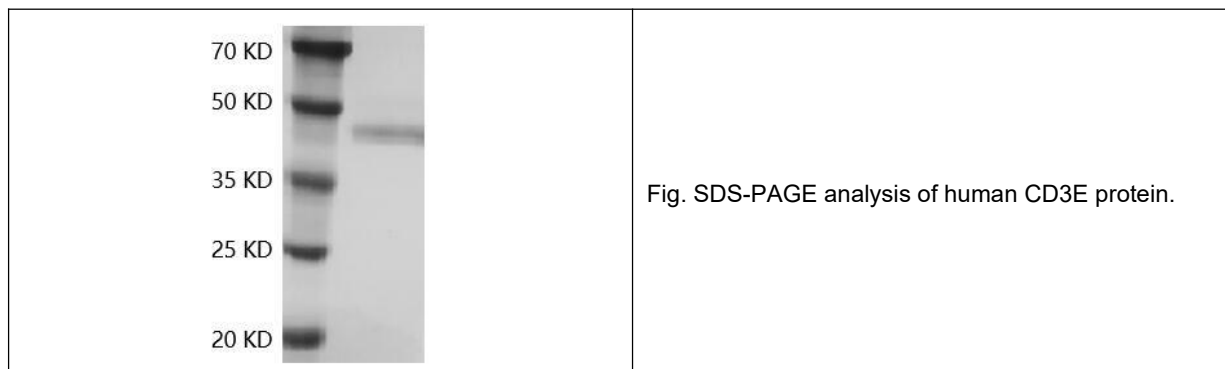
**Biological Activity:** Testing in progress.

**Endotoxin:** <0.1 EU per µg of the protein as determined by the LAL method.

**Formulation:** 0.22 µm filtered protein solution is in PBS.

**Storage Instructions:** Lyophilized human CD3E protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized human CD3E protein using the buffer we provided not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.



**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We can not be responsible for patent infringements or other violations that may occur with the use of this product.