## Recombinant Human CD3 ε/CD3E Protein (His Tag)

## Catalog Number: PKSH033388

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Species	Human	
Source	HEK293 Cells-derived Human CD3 ɛ/CD3E protein Asp23-Asp126, with an C-terminal	
	His	
Calculated MW	12.8 kDa	
Observed MW	15-21 kDa	
Accession	P07766	
<b>Bio-activity</b>	Immobilized Human CD3E-His at 10 ug/ml (100 ul/wel)can bind Human Anti-CD3	
	mAb. The ED <sub>50</sub> of Recombinant Human Anti-CD3 mAb is 3-15 ng/ml.	
Properties		
Purity	> 95 % as determined by reducing SDS-PAGE.	
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.	
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -8	
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of	
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.	
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.	
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.	
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants	
	before lyophilization.	
	Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	

Data

kDa	MK	R
120 90		
90 60		
40	-	
30	-	
20	-	-
14	1	

> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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T-Cell Surface Glycoprotein CD3 ε Chain (CD3ε) is a single-pass type I membrane protein. CD3ε contains 1 Ig-like ( immunoglobulin-like) domain and 1 ITAM domain. CD3ε is a polypeptide encoded by the CD3E gene on chromosome 11 in humans. The T cell receptor-CD3 complex (TCR/CD3 complex) is involved in T-cell development and several intracellular signal-transduction pathways. This complex is critical for T-cell development and function, and represents one of the most complex transmembrane receptors. The T cell receptor-CD3 complex is unique in having ten cytoplasmic immunoreceptor tyrosine-based activation motifs (ITAMs). TCR/CD3 complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways.