

**Anti-CD3 Reference Antibody (otelixizumab)  
Recombinant Antibody  
Catalog # APR10613**

**Specification**

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**Anti-CD3 Reference Antibody (otelixizumab) - Product Information**

Application	FC, E, FTA
Primary Accession	<a href="#">P07766</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	144.58 KDa

**Anti-CD3 Reference Antibody (otelixizumab) - Additional Information**

**Target/Specificity**  
CD3

**Endotoxin**  
< 0.001EU/ µg,determined by LAL method.

**Conjugation**  
Unconjugated

**Expression system**  
CHO Cell

**Format**  
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

**Anti-CD3 Reference Antibody (otelixizumab) - Protein Information**

**Name** CD3E

**Synonyms** T3E

**Function**  
Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR- mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways (PubMed: <http://www.uniprot.org/citations/2470098> target="\_blank">2470098</a>). In addition of this role of signal transduction in T-cell activation, CD3E plays an essential role in correct T-cell development. Initiates the TCR-CD3 complex assembly by forming the two heterodimers CD3D/CD3E and CD3G/CD3E. Participates also in

internalization and cell surface down- regulation of TCR-CD3 complexes via endocytosis sequences present in CD3E cytosolic region (PubMed:<a href="http://www.uniprot.org/citations/10384095" target="\_blank">10384095</a>, PubMed:<a href="http://www.uniprot.org/citations/26507128" target="\_blank">26507128</a>). In addition to its role as a TCR coreceptor, it serves as a receptor for ITPRIPL1. Ligand recognition inhibits T-cell activation by promoting interaction with NCK1, which prevents CD3E-ZAP70 interaction and blocks the ERK- NFkB signaling cascade and calcium influx (PubMed:<a href="http://www.uniprot.org/citations/38614099" target="\_blank">38614099</a>).

#### Cellular Location

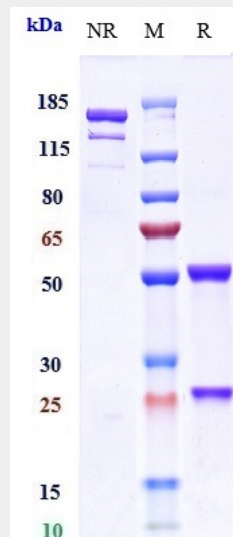
Cell membrane; Single-pass type I membrane protein

#### Anti-CD3 Reference Antibody (otelixizumab) - Protocols

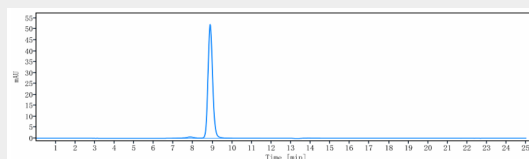
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-CD3 Reference Antibody (otelixizumab) - Images



Anti-CD3 Reference Antibody (otelixizumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-CD3 Reference Antibody (otelixizumab) is more than 95% ,determined by

SEC-HPLC.