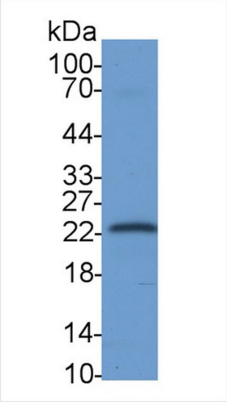
Tcell Surface Glycoprotein CD3 Epsilon (CD3e) Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	TCell Surface Glycoprotein CD3 Epsilon (CD3e), Monoclonal Antibody
Full Product Name	Monoclonal Antibody to TCell Surface Glycoprotein CD3 Epsilon (CD3e)
Product Gene Name	anti-CD3e antibody
Product Synonym Names	CD3e/TCell Surface Glycoprotein CD3 Epsilon; T3E; TCRE; CD3E Molecule, Epsilon(CD3TCR Complex); Tcell surface antigen T3/Leu4 epsilon chain
Clonality	Monoclonal
Isotype	IgG2b Kappa
Clone Number	C8
Host	Mouse
Species Reactivity	Human
Form/Format	Liquid; 0.01M PBS, pH7.4, containing 0.05% Proclin300, 50% glycerol.
Purity/Purification	Protein A + Protein G affinity chromatography
Concentration	1mg/mL (lot specific)
Specificity	The antibody is a mouse monoclonal antibody raised against CD3e. It has been selected for its ability to recognize CD3e in immunohistochemical staining and western blotting.
Preparation and Storage	Store at 2 degree C to 8 degree C for frequent use, 20 degree C for 24 months The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Matching Pairs	Unconjugated Antibody: CD3e Clone #C8 (MBS2139239) APC-CY7 Conjugated Antibody: CD3e Clone #C8 (MBS2135909)
Matching Pairs	Unconjugated Antibody: CD3e Clone #C8 (MBS2139239) PE Conjugated Antibody: CD3e Clone #C8 (MBS2135912)
Matching Pairs	Unconjugated Antibody: CD3e Clone #C8 (MBS2139239) APC Conjugated Antibody: CD3e Clone #C8 (MBS2135915)
Matching Pairs	Unconjugated Antibody: CD3e Clone #C8 (MBS2139239) Cy3 Conjugated Antibody: CD3e Clone #C8 (MBS2135918)
Matching Pairs	Unconjugated Antibody: CD3e Clone #C8 (MBS2139239) Biotin Conjugated Antibody: CD3e Clone #C8 (MBS2135921)
Matching Pairs	Unconjugated Antibody: CD3e Clone #C8 (MBS2139239) FITC Conjugated Antibody: CD3e Clone #C8 (MBS2135924)
Matching Pairs	Unconjugated Antibody: CD3e Clone #C8 (MBS2139239) HRP Conjugated Antibody: CD3e Clone #C8 (MBS2135927)
Molecular Weight	207
OMIM	gene 615615
3D Structure	ModBase 3D Structure for P07766

Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Immunogen Type	Prokaryotic Recombinant proteins/RP
Sequence of Immunogen	Met28~Asn185
Conjugation	Unconjugated
Product Categories/Family for anti-CD3e antibody	Immune molecule; Primary
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Applications Tested/Suitable for anti-CD3e antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunoprecipitation (IP)
Application Notes for anti-CD3e antibody	WB: 0.52ug/mL IHC: 520ug/mL ICC: 520ug/mL
Related Product Information for anti-CD3e antibody	MBS2139239 is an antibody targeting CD3e. Also known as Monoclonal Antibody to TCell Surface Glycoprotein CD3 Epsilon (CD3e). Reactive in Human. Host: Mouse.
Other Notes	Small volumes of anti-CD3e antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-CD3e antibody
Western Blot; Sample: Jurkat cell lysate Primary Ab: 2ug/ml Mouse AntiHuman CD3e Antibody Second Ab: 0.2ug/mL HRPLinked Caprine AntiMouse IgG Polyclonal Antibody (Catalog: SAA544Mu19)

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD3e. It may not necessarily be applicable to this product.

NCBI GI #	1345708
NCBI GeneID	916
NCBI Accession #	P07766.2
UniProt Primary Accession #	P07766
UniProt Secondary Accession #	A8K997
UniProt Related Accession #	P07766
NCBI Official Full Name	T-cell surface glycoprotein CD3 epsilon chain
NCBI Official Synonym Full Names	CD3e molecule, epsilon (CD3-TCR complex)
NCBI Official Symbol	CD3E

NCBI Official Synonym Symbols	T3E; TCRE; IMD18
UniProt Protein Name	T-cell surface glycoprotein CD3 epsilon chain
UniProt Synonym Protein Names	T-cell surface antigen T3/Leu-4 epsilon chain; CD_antigen: CD3e
Protein Family	T-cell surface glycoprotein
UniProt Gene Name	CD3E
UniProt Synonym Gene Names	T3E
UniProt Entry Name	CD3E_HUMAN
NCBI Protein Information	T-cell surface glycoprotein CD3 epsilon chain; CD3-epsilon; T-cell surface antigen T3/Leu-4 epsilon chain; CD3e antigen, epsilon polypeptide (TiT3 complex); T-cell antigen receptor complex, epsilon subunit of T3
NCBI Summary for CD3e	The protein encoded by this gene is the CD3-epsilon polypeptide, which together with CD3-gamma, -delta and -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 to several intracellular signal-transduction pathways. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. The epsilon polypeptide plays an essential role in T-cell development. Defects in this gene cause immunodeficiency. This gene has also been linked to a susceptibility to type I diabetes in women. [provided by RefSeq, Jul 2008]
UniProt Comments for CD3e	CD3E: a T cell surface glycoprotein that is a component of the T cell antigen receptor. The recruitment of Nck by CD3 epsilon reveals a ligand-induced conformational change essential for T cell receptor signaling and synapse formation. Contains 1 immunoglobulin-like domain and 1 ITAM domain. Protein type: Receptor, misc.; Membrane protein, integral Chromosomal Location of Human Ortholog: 11q23 Cellular Component: T cell receptor complex; integral to plasma membrane; plasma membrane; immunological synapse; alpha-beta T cell receptor complex; intercellular junction; external side of plasma membrane Molecular Function: protein binding; transmembrane receptor activity; receptor signaling complex scaffold activity; protein heterodimerization activity; receptor signaling protein activity; T cell receptor binding; SH3 domain binding; protein kinase binding Biological Process: regulation of immune response; T cell activation; positive regulation of interleukin-2 biosynthetic process; signal complex assembly; positive regulation of calcium-mediated signaling; negative thymic T cell selection; T cell receptor signaling pathway; positive regulation of interleukin-4 production; regulation of apoptosis; G-protein coupled receptor protein signaling pathway; positive regulation of interferon-gamma production; positive regulation of peptidyl-tyrosine phosphorylation; cell surface receptor linked signal transduction; negative regulation of smoothened signaling pathway; T cell costimulation; protein complex assembly; positive regulation of alpha-beta T cell proliferation; positive regulation of T cell proliferation; positive regulation of T cell anergy; transmembrane receptor protein tyrosine kinase signaling pathway; response to nutrient Disease: Immunodeficiency 18
Research Articles on CD3e	**1.** that Nck recruitment to the TCR is fundamental to mount an efficient T cell response in vivo, and that the Nck-CD3epsilon interaction may represent a target for pharmacological modulation of the immune response.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/monoclonal-human-antibody/tcell-surface-glycoprotein-cd3-epsilon-cd3e/2139239