

## Product datasheet for **UM500048CF**

### CD3E Mouse Monoclonal Antibody [Clone ID: UMAB54]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB54
Applications:	IF, WB
Recommended Dilution:	WB 1:500, IF 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human CD3E(NP_000724) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	20.7 kDa
Gene Name:	CD3e molecule
Database Link:	<a href="#">NP_000724</a> <a href="#">Entrez Gene 916 Human P07766</a>



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**Background:**

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]

**Synonyms:**

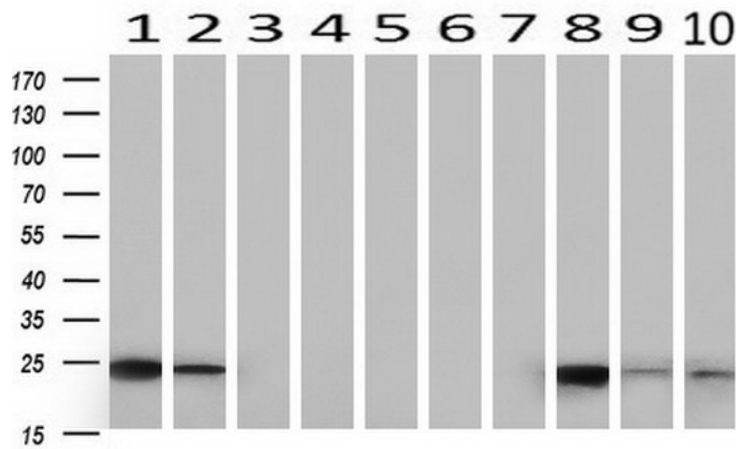
IMD18; T3E; TCRE

**Protein Families:**

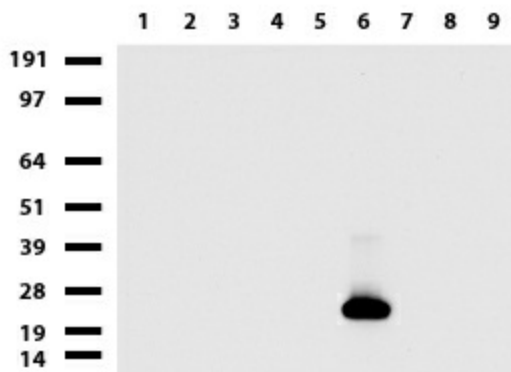
Druggable Genome, Transmembrane

**Protein Pathways:**

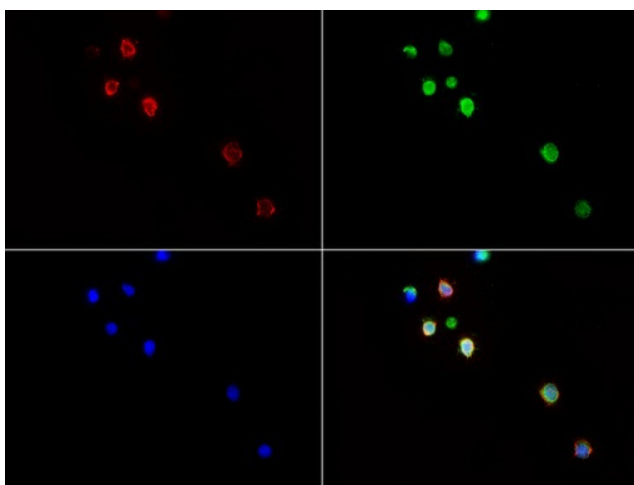
Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway

**Product images:**


Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-CD3E monoclonal antibody at 1:500 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon; 10: spleen).



Western blot analysis of extracts (35ug) from 9 different cell lines (1: HepG2, 2: HeLa, 3: SV-T2, 4: A549, 5: COS7, 6: Jurkat, 7: MDCK, 8: PC-12, 9: MCF7) by using anti-CD3E clone UMAB54 monoclonal antibody. (Cat# [UM500048]; Dilution: 1:500).



Immunofluorescent staining of Jurkat cells using CD3E mouse monoclonal antibody ([UM500048], green). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue). The three-color overlay image is located at the bottom-right corner.