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EB12592 - Goat Anti-CD3E (cytoplasmic) Antibody 🏹

Size: 100µg specific antibody in 200µl

Target Protein

Principal Names: CD3E, CD3e molecule, epsilon (CD3-TCR complex), IMD18, T3E, TCRE, CD3-epsilon, CD3e antigen, epsilon polypeptide (TiT3 complex), T-cell antigen receptor complex, epsilon subunit of T3, T-cell surface antigen T3/Leu-4 epsilon chain, T-cell surface glycoprorotein CD3 epsilon chain

Official Symbol: CD3E

Accession Number(s): NP_000724.1 Human GeneID(s): <u>916</u> Non-Human GeneID(s): 315609 (rat)

Important Comments: This antibody is designed to recognize the cytoplasmic domain (aa153-207) of the protein.

Immunogen

Peptide with sequence C-RKGQRDLYSGLNQR, from the internal region of the protein sequence according to NP_000724.1.

Please note the peptide is available for sale.

Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

Applications Tested

Peptide ELISA: antibody detection limit dilution 1:128000.

Western blot: Approx 22kDa band observed in lysates of cell lines Jurkat and Molt4 (calculated MW of 23.1kDa according to NP_000724.1). Recommended concentration: 0.1-0.3µg/ml. Primary incubation was 1 hour. This antibody has been successfully used in WB on Human, PMID: 36078131.

Additional validation: This antibody has been successfully used in the following paper: Sikorski et al. (2018) PMID: 30377371.

Species Reactivity

Tested: Human Expected from sequence similarity: Human, Rat, Pig

Specific References

This antibody has been successfully used in WB on Human:

Annika Schultz, Marvin Schnurra, Ali El-Bizri, Nadine M Woessner, Sara Hartmann, Roland Hartig, Susana Minguet, Burkhart Schraven, Luca Simeoni A Cysteine Residue within the Kinase Domain of Zap70 Regulates Lck Activity and Proximal TCR Signaling. Cells. 2022 Sep 1;11(17):2723. PMID: 36078131

This antibody has been successfully used in the following paper: Matthias Kästle, Camilla Merten, Roland Hartig, Thilo Kaehne, Ardiyanto Liaunardy-Jopeace, Nadine M Woessner, Wolfgang W Schamel, John James, Susana Minguet, Luca Simeoni, Burkhart Schraven Tyrosine 192 within the SH2 domain of the Src-protein tyrosine kinase p56Lck regulates T-cell activation independently of Lck/CD45 interactions. Cell Commun Signal. 2020 Nov 23;18(1):183. PMID: 33225946

This antibody has been successfully used in the following paper:

Krzysztof Sikorski, Adi Mehta, Marit Inngjerdingen, Flourina Thakor, Simon Kling, Tomas Kalina, Tuula A. Nyman, Maria Ekman Stensland, Wei Zhou, Gustavo A. De Souza, Lars Holden, Jan Stuchly, Markus Templin and Fridtjof Lund-Johansen A high-throughput pipeline for validation of antibodies

Nat Methods. 2018 Nov;15(11):909-912 PMID: 30377371 EB12592 (0.1µg/ml) staining of Jurkat (A) and Molt4 (B) lysates (35µg protein in RIPA buffer). Detected by chemiluminescence.