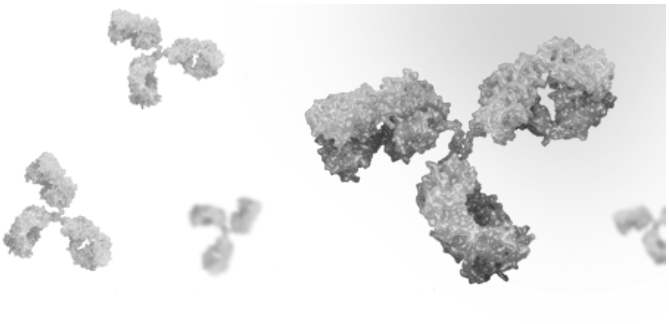

CD3e Polyclonal Antibody

Cat. No.: NHP-AB498
This product is for research use only and is not intended for diagnostic use.

This product is an antibody that was generated by immunizing rabbit against amino acids ERPPPVPNPDYEP (156-168). It is used only in *in vitro* assays.

Detailed Product Description

Introduction	The CD3 subunit complex which is crucial in transducing antigen-recognition signals into the cytoplasm of T cells and in regulating the cell surface expression of the TCR complex. T cell activation through the antigen receptor (TCR) involves the cytoplasmic tails of the CD3 subunits CD3 gamma, CD3 delta, CD3 epsilon and CD3 zeta. These CD3 subunits are structurally related members of the immunoglobulins super family encoded by closely linked genes on human chromosome 11. The CD3 components have long cytoplasmic tails that associate with cytoplasmic signal transduction molecules and this association is mediated at least in part by a double tyrosine-based motif present in a single copy in the CD3 subunits. CD3 may play a role in TCR-induced growth arrest, cell survival and proliferation. The CD3 antigen is present on 68-82% of normal peripheral blood lymphocytes, 65-85% of thymocytes and Purkinje cells in the cerebellum. It is never expressed on B or NK cells. Decreased percentages of T lymphocytes may be observed in some autoimmune diseases. The genes encoding the CD3 epsilon, gamma and delta polypeptides are located on chromosome 11. Defects in the CD3 gene are associated with CD3 immunodeficiency.
Conjugate	None
Antibody Isotype	IgG
Applications	Flow Cytometry; IP; WB

Technical Specifications

Host Species	Rabbit

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Species Reactivity	Bovine; Cat; Chicken; Dog; Frog; Guinea Pig; Hamster; Horse; Human; Mouse; Opossum; Pig; Monkey; Rabbit; Rat; Sheep
Immunogen	Amino acids ERPPPVPNPDYEP (156-168)

Product Property

Purification	Protein A
Format	Liquid
Concentration	0.2 mg/mL
Buffer	PBS with 0.1 mg/ml BSA and 0.05% sodium azide
Storage	Store at 4ºC. Avoid freeze-thaw cycles.

Target Information

Clonality	Polyclonal
Alternative Names	CD247; CD3-DELTA; CD3-GAMMA; CD3-ZETA; CD3D; CD3E; CD3G; CD3H; CD3Q; CD3Z; IMD17; IMD18; IMD19; IMD25; T3D; T3E; T3G; T3Z; TCRE; TCRZ
Entrez Gene ID	916
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. 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.

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