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## FITC Hamster anti-CD3 zeta (CD247) Monoclonal Antibody

**CLX377F**

**Lot:**

**Size:** 0.1 mg

**Clone:** H146-968

**Isotype:** Hamster IgG

**Specificity:** The hamster antibody H146-968 reacts with CD3 zeta chain (CD247), which is a component of TCR/CD3 complex expressed on T cells.

**Immunogen:** Synthetic peptide corresponding to amino acids 151-164 of mouse CD3 zeta.

**Species Reactivity:** Human, Mouse

**Preparation:** The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC.

**Concentration:** 1 mg/ml

**Storage Buffer:** Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

**Storage / Stability:** Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.

**Usage:** The reagent is designed for Flow Cytometry analysis.

Suggested working concentration is 2 µg/ml. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.

**Background:** CD3 complex 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 CD3gamma, CD3 delta, CD3 epsilon and CD3 zeta (CD247). 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. 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.

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*This product is made available in collaboration with Exbio Praha, a.s.*

**Laboratory Reagent For Research Use Only**

JV 09/27/10