10320 Camino Santa Fe, Suite G
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Anti-CD3 epsilon Rabbit Monoclonal Antibody
Catalog # ABO14080

Specification

Anti-CD3 epsilon Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IP, FC**
Primary Accession	P07766
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-CD3 epsilon Rabbit Monoclonal Antibody . Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human.

Anti-CD3 epsilon Rabbit Monoclonal Antibody - Additional Information

Gene ID 916

Other Names
T-cell surface glycoprotein CD3 epsilon chain, T-cell surface antigen T3/Leu-4 epsilon chain, CD3e, CD3E, T3E

Calculated MW
23147 MW KDa

Application Details
WB 1:500-1:2000
IHC 1:50-1:200
IP 1:30
FC 1:100

Subcellular Localization
Membrane; Single-pass type I membrane protein.

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human CD3 epsilon

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

Anti-CD3 epsilon Rabbit Monoclonal Antibody - Protein Information

Name CD3E

Synonyms T3E

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 (PubMed:2470098). 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 (PubMed:10384095, PubMed:26507128). In addition to its role as a TCR coreceptor, it serves as a receptor for ITPRIPL1. Ligand recognition inhibits T-cell activation by promoting interaction with NCK1, which prevents CD3E-ZAP70 interaction and blocks the ERK- NFkB signaling cascade and calcium influx (PubMed:38614099).

Cellular Location
Cell membrane; Single-pass type I membrane protein

Anti-CD3 epsilon Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD3 epsilon Rabbit Monoclonal Antibody - Images

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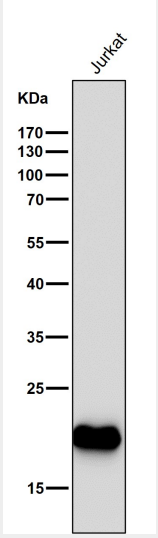
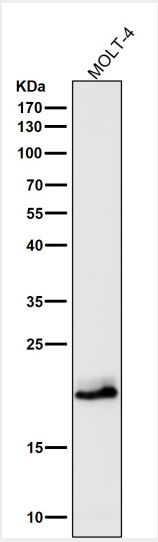


All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



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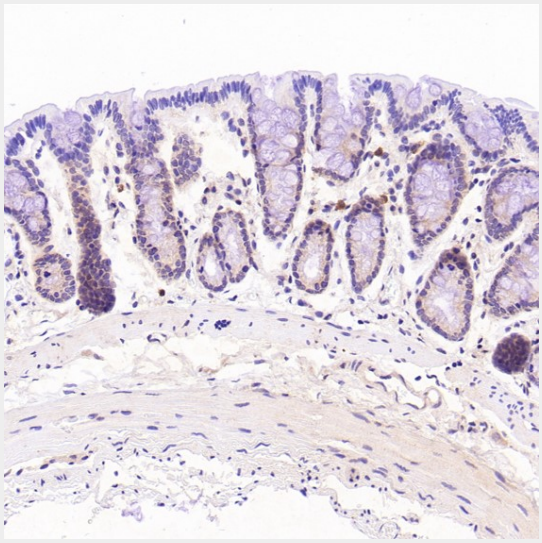

Immunohistochemical analysis of paraffin-embedded Rat stomach, using the Antibody at 1:100

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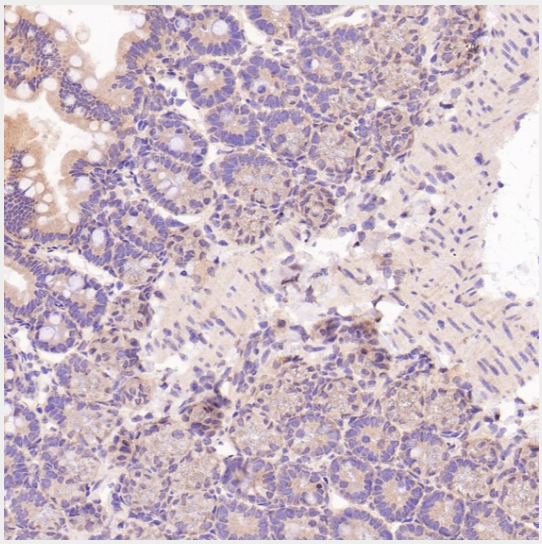
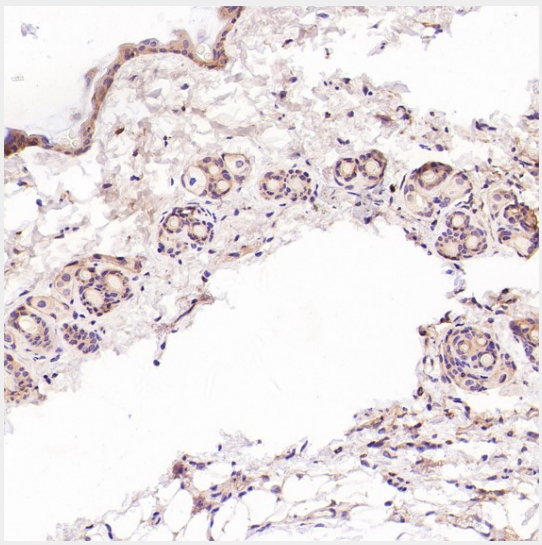
dilution.



Immunohistochemical analysis of paraffin-embedded Mouse intestine, using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded Mouse skin, using the Antibody at 1:100 dilution.

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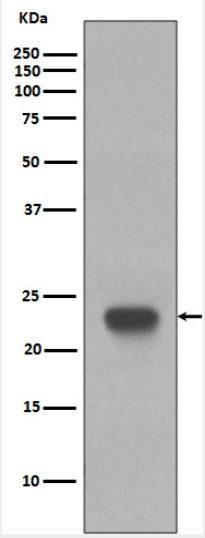
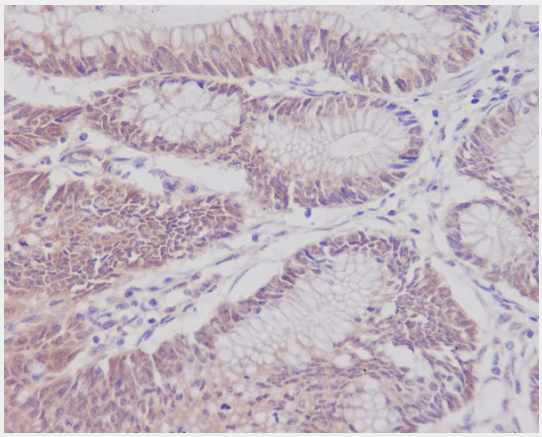


Western blot analysis of CD3 epsilon expression in Jurkat cell lysate.



Immunohistochemical analysis of paraffin-embedded human colon cancer, using CD3 epsilon Antibody.