Rabbit Monoclonal Antibody to Human CD3e / CD3 epsilon

Catalog Number: **10977-R301**

Sino Biological Inc.
Biological Solution Specialist

General Information	
Immunogen:	Recombinant Human CD3e / CD3 epsilon protein (Catalog#10977-H08H)
Clone ID:	301
Ig Type:	Rabbit IgG
Applications:	ELISA, IHC-P
Specificity:	Human CD3e / CD3 epsilon
Formulation:	0.2 μm filtered solution in PBS, ,pH7.4
Storage:	< -20℃

Preparation

This antibody was obtained from a rabbit immunized with purified, recombinant Human CD3e / CD3 epsilon (rh CD3e / CD3 epsilon; Catalog#10977-H08H; NP_000724.1; Met1-Asp126).

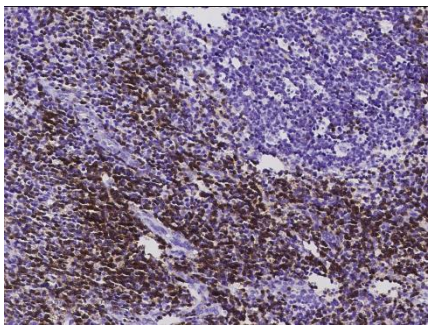
Storage

This antibody can be stored at 2℃-8℃ for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20℃ to -80℃. **Preservative-Free.**
Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

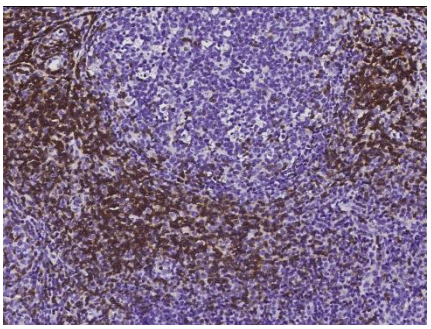
Applications

Immunochemistry –

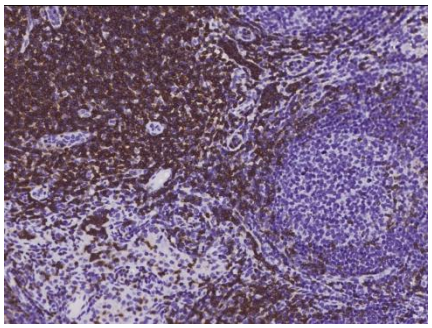
IHC-P: 1-10 μg/mL



Immunochemical staining of human CD3E in human tonsil with rabbit monoclonal antibody (5 μg/mL, formalin-fixed paraffin embedded sections).



Immunochemical staining of human CD3E in cynomolgus macaque tonsil with rabbit monoclonal antibody (5 μg/mL, formalin-fixed paraffin embedded sections).



Immunochemical staining of human CD3E in cynomolgus macaque lymphnode with rabbit monoclonal antibody (5 μg/mL, formalin-fixed paraffin embedded sections).

Direct ELISA –This antibody can be used at 0.1-0.2 μg/mL with the appropriate secondary reagents to detect Human CD3e / CD3 epsilon.

Specificity

Human CD3e / CD3 epsilon

Cross reactivity

Reacts with

Cynomolgus

Rabbit Monoclonal Antibody to Human CD3e / CD3 epsilon

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Background

T-cell surface glycoprotein CD3 epsilon chain, also known as CD3E, is a single-pass type I membrane protein. CD3E contains 1 Ig-like (immunoglobulin-like) domain and 1 ITAM domain. CD3E, together with CD3-gamma, CD3-delta and CD3-zeta, and the T-cell receptor alpha/beta and gamma/delta heterodimers, forms the T cell receptor-CD3 complex. The genes encoding the epsilon, gamma and delta polypeptides are located in the same cluster on chromosome 11. T cell receptor-CD3 complex plays an important role in coupling antigen recognition to several intracellular signal-transduction pathways. This complex is critical for T-cell development and function, and represents one of the most complex transmembrane receptors. The T cell receptor-CD3 complex is unique in having ten cytoplasmic immunoreceptor tyrosine-based activation motifs (ITAMs). CD3E plays an essential role in T-cell development, and defects in CD3E gene cause severe immunodeficiency. This gene has also been linked to a susceptibility to type I diabetes in women. CD3E has been shown to interact with TOP2B, CD3EAP and NCK2.

Reference

1. Scherer D.C. et al.,1995, Proc. Natl. Acad. Sci. USA. 92: 11259-11263.
2. Jungnickel B. et al., 2000, J. Exp. Med. 191: 395-402.