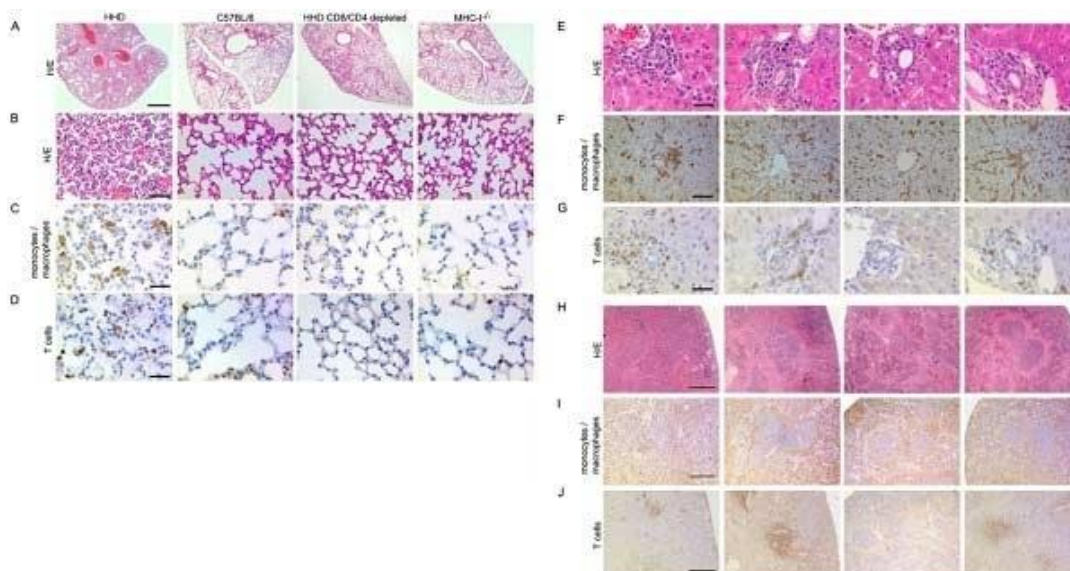


## Rat Anti-Human CD3 [Clone CD3-12]

Cat # NB-47-02842-25UG size: 25µg



**Citation:** Flatz L, Rieger T, Merkler D, Bergthaler A, Regen T, Schedensack M, et al. (2010)  
T Cell-Dependence of Lassa Fever Pathogenesis.  
PLoS Pathog 6(3): e1000836. doi:10.1371/journal.ppat.1000836



Rat anti Human CD3 antibody, clone CD3-12 used for the detection of CD3 expressing cells in murine tissues by immunohistochemistry on formalin fixed, paraffin embedded tissue sections.

### Description

Rat anti Human CD3 antibody, clone CD3-12 raised against a peptide representing an invariant cytoplasmic sequence within the CD3 $\epsilon$  chain recognizes human CD3 $\epsilon$ . CD3 is a multimeric protein complex composed of four distinct polypeptide chains ( $\epsilon$ ,  $\gamma$ ,  $\delta$ ,  $\zeta$ ) that assemble and function as three pairs of dimers ( $\epsilon\gamma$ ,  $\epsilon\delta$ ,  $\zeta\zeta$ ). The CD3 complex serves as a T cell co-receptor that associates non-covalently with the T cell receptor (TCR) (Malissen 2008; Guy and Vignali 2009; Smith-Garvin et al. 2009). CD3 is a defining feature of cells belonging to the T cell lineage and can therefore be used as T cell marker.

As Rat anti Human CD3, clone CD3-12 has been specifically raised against an epitope within the epsilon peptide chain, highly conserved among species clone CD3-12 has a very broad species crossreactivity for the CD3 marker. (Jones et al. 1993; Kothlow et al. 2005).

### Product Information

**Host:** Rat  
**Applications:** Flow Cytometry, Immunofluorescence, Immunohistology - Frozen, Immunohistology - Paraffin, WB  
**Reactivity:** Human

<b>Cross-Reactivity:</b>	Bovine, Dog, Horse, Rhesus Monkey, Pig, Chicken, Mouse, Duck, Koala, Harbour Porpoise, Alpaca, Cynomolgus monkey, Spotted Hyena, Sea Lion, Cat, Amazon Parrot, Raccoon, Great horned owl ( <i>Bubo virginianus</i> ), Bullfrog, <i>Xenopus</i> , Rabbit, African green monkey Expected from Sequence: Mammals, Birds, Amphibia	
<b>Clonality:</b>	Monoclonal	
<b>Clone ID:</b>	CD3-12	
<b>Conjugation:</b>	Unconjugated	
<b>Isotype:</b>	IgG	
<b>Formulation:</b>	PBS, 0.09% Sodium Azide, carrier free.	
<b>Purification:</b>	Purified IgG prepared from tissue culture supernatant.	
<b>Concentration:</b>	1 mg/mL	
<b>Dilution Range:</b>	Flow Cytometry <sup>1</sup>	1/50 - 1/100
	Immunohistology - Frozen	1/100
	Immunohistology - Paraffin <sup>2</sup>	1/100

<sup>1</sup>Membrane permeabilization is required for this application.

<sup>2</sup>This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Tris/EDTA buffer pH 9.0 is recommended for this purpose.

**Storage Instruction:** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

## Target

<b>Protein Name:</b>	CD3E
<b>Uniprot ID:</b>	P07766
<b>Immunogen Region:</b>	100aa C-Term
<b>Immunogen:</b>	Synthetic peptide sequence derived from cytoplasmic epitope of CD3 (Glu-Arg-Pro-Pro-Pro-Val-Pro-Asn-Pro-Asp-Tyr-Glu-Pro-Cys) (ERPPPVPNPDYEPC).

## References

1. Cornet, A. et al. (2001) Enterocolitis induced by autoimmune targeting of enteric glial cells: a possible mechanism in Crohn's disease? *Proc Natl Acad Sci U S A.* 98: 13306-11.
2. Holtappels, R. et al. (1998) Control of murine cytomegalovirus in the lungs: relative but not absolute immunodominance of the immediate-early 1 nonapeptide during the antiviral cytolytic T-lymphocyte response in pulmonary infiltrates. *J Virol.* 72: 7201-12.
3. Hudson, K.J. and Bouton, A.H. (2006) *Yersinia pseudotuberculosis* adhesins regulate tissue-specific colonization and immune cell localization in a mouse model of systemic infection. *Infect Immun.* 74: 6487-90.

And several others. Please contact [info@neo-biotech.com](mailto:info@neo-biotech.com) for a complete list.

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