

Monoclonal Antibody to T Cell Receptor (TCR) gamma/delta - FITC

Alternate names:	T-Cell Receptor delta, T-Cell Receptor gamma, T-Cell Receptor gamma delta, T-cell receptor T3 gamma/delta, T-cell surface glycoprotein CD3 gamma/delta, TCRD, TCRG
Catalog No.:	AM08117FC-N
Quantity:	0.5 mg
Concentration:	0.5 mg/ml
Background:	<p>T cell receptors (TCR) recognize foreign antigens which have been processed as small peptides and bound to major histocompatibility complex (MHC) molecules at the surface of antigen presenting cells (APC). Each T cell receptor is a dimer consisting of one alpha and one beta chain or one delta and one gamma chain. Unlike human and mouse, in which gamma/delta cells comprise a minor subset of T lymphocytes in the circulation, the chicken has a relatively large subset of gamma/delta T cells. The frequency of TCR gamma/delta cells is usually 20-25% of the total blood T cells, but may reach approximately 50% in chickens of 6 months of age. The majority of TCRgamma/delta+ cells in the thymus and blood are CD4-CD8-, although a small subset of them may express CD8 or CD4 coreceptors. However, when the TCRgamma/delta+ cells migrate into the spleen and intestine, most of them begin to express CD8. Although the biological function of gamma/delta T cells is unclear, they are clearly capable of cytotoxic activity in vitro. The CD8+ gamma/delta T cells may also be involved in down-regulation of the immune response. They cannot, however, induce a graft-vs-host (GVH) reactions.</p>
Host / Isotype:	Mouse / IgG1
Clone:	TCR1
Format:	<p>State: Liquid purified Ig fraction. Buffer System: PBS containing 0.09% Sodium Azide as preservative. Label: FITC – Fluorescein Isothiocyanate Isomer 1</p>
Applications:	<p>Flow Cytometry: < / = 1 µg/10e6 cells. (Ref.1-3) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
Specificity:	<p>This antibody recognizes TCR gamma/delta. It precipitates a heterodimer of Mr 90-kDa (two bands of Mr 40-kDa and 50-kDa upon reduction) on Chicken peripheral blood T cells. (Ref.1,2) Deglycosylation of the heterodimer yields two polypeptides of Mr 35-kDa and 32-kDa from TCR1 precipitates. Species: Chicken. Other species not tested.</p>

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
Free Call: 0800-2274746 (Germany only) - www.acris-antibodies.com

Storage: Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

1. Sowder, J.T., C.-L. Chen, L.L. Ager, M.M. Chan, and M.D. Cooper. 1988. J. Exp. Med. 167:315.
2. Chen, C.H., J. Cihak, U. Lösch, and M.D. Cooper. 1988. Eur. J. Immunol. 18:539
3. Quere, P., M.D. Cooper, and G.J. Thorbecke. 1990. Immunology 71:517.
4. Chen, C.H., T.W.F. Göbel, T. Kubota, and M.D. Cooper. 1993. 1994. Poultry Science 73:1012.
5. Chen, C.-L. 1996. Personal communication.
6. Sowder, J.T., C.H. Chen, L.L. Ager, J. Cihak, U. Lösch, and M.D. Cooper. 1988b. Fed. Proc. 2:874.
7. Cihak, J., U. Lösch, G. Hoffman-Hezer, C.H. Chen, M.D. Cooper, and H.W.L. Ziegler-Heitbrock. 1993. Scand. J. Immunol. 38:123.

Pictures: **Immunofluorescent Staining:** Chicken PBMC were double stained with Mouse anti-Chicken TCR gamma/delta-FITC and Mouse anti-Chicken CD3-PE. Small lymphocytes were then gated and analyzed on a FACScan(TM) flow cytometer (BDIS, San Jose, CA). Amount Used: 1 µg/10e6 cells.

