
Product Data Sheet

KIRAVIA Blue 520™ anti-human CD3

Catalog # / Size: 2102410 / 100 tests
2102405 / 25 tests

Clone: UCHT1

Isotype: Mouse IgG1, κ

Immunogen: IL-2-dependent cytolytic mouse T-cell clone B6.1

Reactivity: Human, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with KIRAVIA Blue 520™ under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: III 471

Concentration: Lot-specific

□ Human Peripheral blood lymphocytes were stained with CD19 APC and CD3 (clone UCHT1) KIRAVIA Blue 520™ (left) or mouse IgG1, κ KIRAVIA Blue 520™ isotype control (right).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 μL per million cells in 100 μL staining volume or 5 μL per 100 μL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* KIRAVIA Blue 520™ has an excitation maximum of 495 nm, and a maximum emission of 520 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections^{4,6,7} and formalin-fixed paraffin-embedded sections¹¹, immunoprecipitation¹, activation of T cells^{2,3,5}, and Western blotting⁹.

□ C57BL/6 mouse splenocytes were stained with CD4 APC and CD25 (clone PC61) KIRAVIA Blue 520™ (left) or rat IgG1, κ KIRAVIA Blue 520™ isotype control (right).

**Application
References:**

1. Salmeron A, *et al.* 1991. *J. Immunol.* 147:3047. (IP)
 2. Graves J, *et al.* 1991. *J. Immunol.* 146:2102. (Activ)
 3. Lafont V, *et al.* 2000. *J. Biol. Chem.* 275:19282. (Activ)
 4. Ryschich E, *et al.* 2003. *Tissue Antigens* 62:48. (IHC)
 5. Thompson AG, *et al.* 2004. *J. Immunol.* 173:1671. (Activ)
 6. Sakkas LI, *et al.* 1998. *Clin. Diagn. Lab. Immun.* 5:430. (IHC)
 7. Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)
 8. Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) [PubMed](#)
 9. Van Dongen JJM, *et al.* 1988. *Blood* 71:603. (WB)
 10. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
 11. Pollard, K. *et al.* 1987. *J. Histochem. Cytochem.* 35:1329. (IHC)
 12. Luckashenak N, *et al.* 2013. *J. Immunol.* 190:27. [PubMed](#)
 13. Laurent AJ, *et al.* 2014. *PLoS One.* 9:103683. [PubMed](#)
 14. Li J, *et al.* 2015. *Cancer Res.* 75:508. [PubMed](#)
 15. Stoeckius M, *et al.* 2017. *Nat. Methods.* 14:865-868. (PG)
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Description: CD3ε is a 20 kD chain of the CD3/T-cell receptor (TCR) complex which is composed of two CD3ε, one CD3γ, one CD3δ, one CD3ζ (CD247), and a T-cell receptor (α/β or γ/δ) heterodimer. It is found on all mature T cells, NKT cells, and some thymocytes. CD3, also known as T3, is a member of the immunoglobulin superfamily that plays a role in antigen recognition, signal transduction, and T cell activation.

**Antigen
References:**

1. Barclay N, *et al.* 1993. *The Leucocyte FactsBook.* Academic Press. San Diego.
2. Beverly P, *et al.* 1981. *Eur. J. Immunol.* 11:329.
3. Lanier L, *et al.* 1986. *J. Immunol.* 137:2501-2507.