

PE/Fire™ 744 anti-human CD3 Antibody

Catalog# / Size	344875 / 25 tests 344876 / 100 tests
Clone	SK7
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	T3, CD3ε
Isotype	Mouse IgG1, κ
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, NK T 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.

Product Details

Verified Reactivity	Human
Reported Reactivity	Chimpanzee
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 744 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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. True-Stain Monocyte Blocker™ (Cat No. 426102) is recommended to minimize non-specific staining of PE/Fire™ 744 on monocytes and macrophages. * PE/Fire™ 744 has a maximum excitation of 565 nm and a maximum emission of 744 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported application (for the relevant formats) include: immunohistochemical staining of frozen tissue sections ^{4,5,8} , immunofluorescent staining ⁶ , and Western blotting ³ .

Application References

(PubMed link indicates
BioLegend citation)

1. Kan EA, *et al.* 1983. *J. Immunol.* 131:536.
2. Wood GS, *et al.* 1985. *Am. J. Pathol.* 120:371.
3. Van Dongen JJM, *et al.* 1988. *Blood* 71:603. (WB)
4. Haringman JJ, *et al.* 2005. *Arthritis Res. Ther.* 7:R862. (IHC)
5. Carbone A, *et al.* 1999. *Blood* 93:2319. (IHC)
6. Goval JJ, *et al.* 2006. *J. Histochem. Cytochem.* 54:75. (IF)
7. Rutjens E, *et al.* 2007. *J. Immunol.* 178:1702.
8. Kap Y, *et al.* 2009. *J. Histochem. Cytochem.* 57:1159. (IHC)
9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

RRID

AB_3720501 (BioLegend Cat. No. 344875)
AB_3720501 (BioLegend Cat. No. 344876)

Antigen Details

Structure	Ig superfamily, with the subunits of CD3 γ , CD3 δ , CD3 ζ , (CD247) and TCR (α/β or γ/δ) forms CD3/TCR complex, 20 kD
Distribution	Mature T and NK T cells, during thymocyte differentiation
Function	Antigen recognition, signal transduction, T cell activation
Ligand/Receptor	Peptide antigen bound to MHC
Cell Type	NKT cells, T cells, Tregs
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules, TCRs
Antigen References	1. Barclay N, <i>et al.</i> 1993. The Leucocyte FactsBook. Academic Press. San Diego. 2. Beverly P, <i>et al.</i> 1981. <i>Eur. J. Immunol.</i> 11:329. 3. Lanier L, <i>et al.</i> 1986. <i>J. Immunol.</i> 137:2501.
Gene ID	916

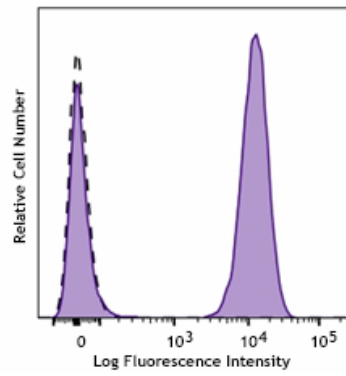
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

GMP PE anti-human CD3, GMP PerCP anti-human CD3, GMP APC anti-human CD3, Spark YG™ 593 anti-human CD3, APC/Fire™ 750 anti-human CD3, GMP FITC anti-human CD3, Spark Violet™ 500 anti-human CD3, PE/Cyanine5 anti-human CD3 Antibody, Brilliant Violet 421™ anti-human CD3, Brilliant Violet 605™ anti-human CD3, Brilliant Violet 711™ anti-human CD3, FITC anti-human CD3, PE anti-human CD3, Brilliant Violet 785™ anti-human CD3, PE/Dazzle™ 594 anti-human CD3, Purified anti-human CD3, APC/Cyanine7 anti-human CD3, PerCP/Cyanine5.5 anti-human CD3, PerCP anti-human CD3, PE/Cyanine7 anti-human CD3, Biotin anti-human CD3, GMP PerCP/Cyanine5.5 anti-human CD3, Alexa Fluor® 647 anti-human CD3, Pacific Blue™ anti-human CD3, Brilliant Violet 650™ anti-human CD3, Spark YG™ 581 anti-human CD3 (Flexi-Fluor™), Spark PLUS UV395™ anti-human CD3, TotalSeq™-A0049 anti-human CD3, TotalSeq™-C0049 anti-human CD3, Alexa Fluor® 660 anti-human CD3, PE/Fire™ 640 anti-human CD3, APC anti-human CD3, Alexa Fluor® 700 anti-human CD3, Brilliant Violet 510™ anti-human CD3, Spark Blue™ 550 anti-human CD3, APC/Fire™ 810 anti-human CD3, PE/Fire™ 700 anti-human CD3, Alexa Fluor® 488 anti-human CD3, PE/Fire™ 744 anti-human CD3, Spark PLUS V450™ anti-human CD3, Brilliant Violet 750™ anti-human CD3, TotalSeq™-B0049 anti-human CD3, Spark NIR™ 685 anti-human CD3

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD3 (clone SK7) PE/Fire™ 744 (filled histogram) or mouse IgG1, κ PE/Fire™ 744 isotype control (open histogram).

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at www.biolegend.com/terms ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587