APC/Cyanine7 anti-human CD3 Antibody

Catalog# / Size	344817 / 25 tests 344818 / 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 APC/Cyanine7 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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.
Excitation Laser	Red Laser (633 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].
Additional Product Notes	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact Technical Service if you have any questions.

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)

Product Citations

1. Calabrese DR, *et al.* 2020. J Clin Invest. . PubMed
2. Muliaditan T, *et al.* 2021. Cell Rep Med. 2:100457. PubMed
3. Kagoya Y, *et al.* 2018. Nat Commun. 9:1915. PubMed
4. Marques RM, *et al.* 2021. Cell Death Differ. 28:3140. PubMed
5. Turner JA, *et al.* 2020. Immunity. 53:1202. PubMed
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18. Mackroth M, *et al.* 2016. PLoS Pathog. 12:e1005909. PubMed
19. Mothe B, *et al.* 2020. Front Immunol. 1.029861111. PubMed
20. Tang X, *et al.* 2020. Sci Adv. 6:eaaz0374. PubMed
21. Yamaguchi K, *et al.* 2018. Cancer Sci. 109:3032. PubMed

RRID

AB_10644011 (BioLegend Cat. No. 344817)
AB_10645474 (BioLegend Cat. No. 344818)

Antigen Details

Structure	Ig superfamily, with the subunits of CD3γ, CD3δ, CD3ζ, (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, *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.
Gene ID	916

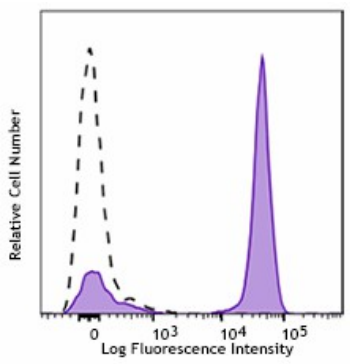
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

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

Product Data



Human peripheral blood lymphocytes were stained with CD3 (clone SK7) APC/Cyanine7 (filled histogram) or mouse IgG1, ? APC/Cyanine7 isotype control (open histogram)

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