# PerCP anti-human CD8 Antibody

| | |
|---|---|
| **Catalog# / Size** | 344707 / 25 tests<br>344708 / 100 tests |
| **Clone** | SK1 |
| **Regulatory Status** | RUO |
| **Other Names** | T8, Leu2 |
| **Isotype** | Mouse IgG1, κ |
| **Description** | CD8a is a 32-34 kD type I glycoprotein. It forms a homodimer (CD8a/a) or heterodimer (CD8a/b) with CD8b. CD8, also known as T8 and Leu2, is a member of the immunoglobulin superfamily found on the majority of thymocytes, a subset of peripheral blood T cells, and NK cells (which express almost exclusively CD8a homodimers). CD8 acts as a co-receptor with MHC class I-restricted T cell receptors in antigen recognition and T cell activation and has been shown to play a role in thymic differentiation. Two domains in CD8a are important for function: the extracellular IgSF domain binds the $\alpha_3$ domain of MHC class I and the cytoplasmic CXCP motif binds the tyrosine kinase p56 Lck. |

## Product Details

| | |
|---|---|
| **Verified Reactivity** | Human, Cynomolgus, Rhesus |
| **Reported Reactivity** | African Green, Chimpanzee, Pigtailed Macaque, Sooty Mangabey |
| **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 PerCP 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.<br><br>* PerCP has a maximum absorption of 482 nm and a maximum emission of 675 nm. |
| **Excitation Laser** | Blue Laser (488 nm) |
| **Application Notes** | Clone SK1 recognizes the a chain of CD8. Additional reported applications (for the relevant formats) include: proteogenomics[8], immunohistochemistry of acetone-fixed frozen tissue sections, and spatial biology (IBEX)[9,10]. This clone was tested in-house and does not demonstrate utility for formalin-fixed paraffin-embedded (FFPE) human tonsil sections. |

**Application References**

**(PubMed link indicates BioLegend citation)**


1. Ledbetter JA, *et al.* 1981. *J. Exp. Med.* 153:310.
2. Campanelli R, *et al.* 2002. *Intl. Immunol.* 14:39.
3. Evans RL, *et al.* 1981. *Immunol.* 78:544.
4. Wooldridge L, *et al.* 2005. *J. Bio. Chem.* 280:27491.
5. Ch'el IL, *et al.* 2011. *J Exp Med.* 208:633. PubMed
6. Carbone A, *et al.* 1999. *Blood* 93:2319. (IHC-F)
7. Ahmed A, *et al.* 2001. *J. Pathol.* 193:383. (IHC)
8. Peterson VM, *et al.* 2017. *Nat. Biotechnol.* 35:936. (PG)
9. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA*. 117:33455-33465. (SB) PubMed
10. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) PubMed


**Product Citations**


1. Cox MJ, *et al.* 2022. Leukemia. 36:1635. PubMed
2. Wu XH, *et al.* 2023. Nat Commun. 14:1820. PubMed
3. Imai H, *et al.* 2023. iScience. 26:106822. PubMed
4. Ishizaka A, *et al.* 2016. J Virol. 90: 5665 - 5676. PubMed
5. Braun J, *et al.* 2020. Nature. 587:270. PubMed
6. Xiao C, *et al.* 2022. iScience. 25:103934. PubMed
7. Lloyd K, *et al.* 2017. Sci Rep. 7:42989. PubMed
8. Seamon K, *et al.* 2020. Front Immunol. 11:396. PubMed
9. Kerstein A, *et al.* 2016. J Autoimmun. S0896-8411(16)30186-X. PubMed
10. Ch'en I, *et al.* 2011. J Exp Med. 208:633. PubMed
11. Caduff N, *et al.* 2021. Cell Reports. 35(5):109056. PubMed
12. Handono K, *et al.* 2020. Eur J Dent. 0.961111111. PubMed


**RRID**

AB_1967122 (BioLegend Cat. No. 344707)
AB_1967149 (BioLegend Cat. No. 344708)

## Antigen Details

| | |
|---|---|
| **Structure** | Ig superfamily, homodimer or heterodimer with CD8b, 32-34 kD |
| **Distribution** | Majority of thymocytes, T cell subset, NK cells |
| **Function** | MHC class I co-receptor, thymic differentiation, T cell activation |
| **Ligand/Receptor** | MHC Class I molecules |
| **Cell Type** | NK cells, T cells, Thymocytes |
| **Biology Area** | Immunology |
| **Molecular Family** | CD Molecules |
| **Antigen References** | 1. Barclay N, *et al.* 1993. *The Leucocyte Antigen FactsBook.* Academic Press Inc. San Diego. |
| **Gene ID** | 925 |

## Related Protocols

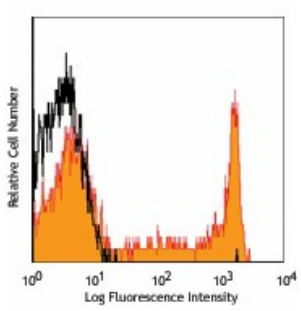
- Cell Surface Flow Cytometry Staining Protocol

## Other Formats

Alexa Fluor® 647 anti-human CD8, Brilliant Violet 650™ anti-human CD8, Purified anti-human CD8, FITC anti-human CD8, PE anti-human CD8, PerCP anti-human CD8, PerCP/Cyanine5.5 anti-human CD8, PE/Cyanine7 anti-human CD8, APC/Cyanine7 anti-human CD8, Alexa Fluor® 488 anti-human CD8, Pacific Blue™ anti-human CD8, Biotin anti-human CD8, APC anti-human CD8, Alexa Fluor® 700 anti-human CD8, Purified anti-human CD8 (Maxpar® Ready), Brilliant Violet 510™ anti-human CD8, Brilliant Violet 711™ anti-human CD8, Brilliant Violet 785™ anti-human CD8, Brilliant Violet 605™ anti-human CD8, PE/Dazzle™ 594 anti-human CD8, APC/Fire™ 750 anti-human CD8, Brilliant Violet 421™ anti-human CD8, TotalSeq™-A0046 anti-human CD8, TotalSeq™-C0046 anti-human CD8, Brilliant Violet 750™ anti-human CD8, TotalSeq™-B0046 anti-human CD8, Spark Blue™ 550 anti-human CD8, APC/Fire™ 810 anti-human CD8, PE/Fire™ 640 anti-human CD8, PE/Fire™ 700 anti-human CD8, TotalSeq™-D0046 anti-human CD8, GMP APC anti-human CD8, PE/Cyanine5 anti-human CD8 Antibody, Spark UV™ 387 anti-human CD8, GMP PE anti-human CD8, GMP PE/Cyanine7 anti-human CD8, Spark NIR™ 685 anti-human CD8, KIRAVIA Blue 520™ anti-human CD8, GMP FITC anti-human CD8, GMP Pacific Blue™ anti-human CD8, GMP PerCP anti-human CD8, Spark Violet™ 500

anti-human CD8, GMP APC/Fire™ 750 anti-human CD8, GMP PerCP/Cyanine 5.5 anti-human CD8, Alexa Fluor® 660 anti-human CD8a, Spark Blue™ 515 anti-human CD8, Spark Blue™ 574 anti-human CD8, Spark Violet™ 538 anti-human CD8, PE/Fire™ 810 anti-human CD8, Spark YG™ 593 anti-human CD8, Brilliant Violet 570™ anti-human CD8, PerCP/Fire™ 806 anti-human CD8, PerCP/Fire™ 780 anti-human CD8, Spark Violet™ 423 anti-human CD8 Antibody

## Product Data




Human peripheral blood lymphocytes stained with SK1 PerCP



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