

Brilliant Violet 650™ anti-human CD132 (common γ chain) Antibody

Catalog# / Size	338614 / 100 tests
Clone	TUGh4
Regulatory Status	RUO
Workshop	VI C-89
Other Names	Common γ chain, γ c, IL-2 receptor γ subunit
Isotype	Rat IgG2b, κ
Description	CD132 is a 64-70 kD type I transmembrane glycoprotein of the Ig superfamily, also known as common γ chain (γ c), or IL-2 receptor γ subunit. It is expressed broadly on T- and B-lymphocytes, NK cells, monocytes, and granulocytes. CD132 is an essential component of cytokine receptors for IL-2, IL-4, IL-7, IL-9, IL-15 and IL-21. Ligand binding induces tyrosine phosphorylation and initiates signaling through a JAK/STAT pathway. CD132 mutation results in X-linked severe combined immune deficiency (XSCID).

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Rat
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 Brilliant Violet 650™ 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	<p>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.</p> <p>Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 650™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 nm)

Application References

1. Itano M, *et al.* 1996. *J. Exp. Med.* 178:389
2. Kondo M, *et al.* 1993. *Science* 262:1874

(PubMed link indicates
BioLegend citation)

RRID AB_3683356 (BioLegend Cat. No. 338614)

Antigen Details

Structure	Type I transmembrane glycoprotein, Ig superfamily 64-70 kD
Distribution	T cells, B cells, NK, monocytes, granulocytes
Ligand/Receptor	Component of cytokine receptors for IL-2, IL-4, IL-7, IL-9, IL-15 and IL-21
Cell Type	B cells, Granulocytes, Monocytes, NK cells, T cells
Biology Area	Immunology
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	<ol style="list-style-type: none">1. Zola H, <i>et al.</i> eds. 2007. <i>Leukocyte and Stromal Cell Molecules: The CD Markers</i>. Wiley-Liss A John Wiley & Sons Inc, Publication2. Nakarai T, <i>et al.</i> 1994. <i>J. Exp. Med.</i> 180:2413. Kawahara A, <i>et al.</i> 1995. <i>Proc. Natl. Acad. Sci. USA.</i> 92:87244. Habib T, <i>et al.</i> 2002. <i>Biochemistry.</i> 41:87255. Matthews DJ, <i>et al.</i> 1995. <i>Blood</i> 85:38
Gene ID	3561

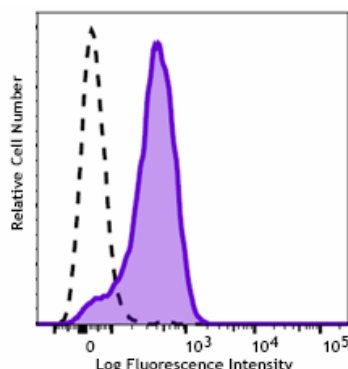
Related Protocols

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

Other Formats

Purified anti-human CD132 (common γ chain), PE anti-human CD132 (common γ chain), APC anti-human CD132 (common γ chain), Ultra-LEAF™ Purified anti-human CD132 (common γ chain), TotalSeq™-C1262 anti-human CD132 (common γ chain), Brilliant Violet 650™ anti-human CD132 (common γ chain)

Product Data



Human peripheral blood mononuclear cells were stained with anti-human CD132 (common γ chain) (clone TUGh4) Brilliant Violet 650™ (filled histogram) or rat IgG2b, κ Brilliant Violet 650™ isotype control (open histogram). Data shown was gated on lymphocytes.

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