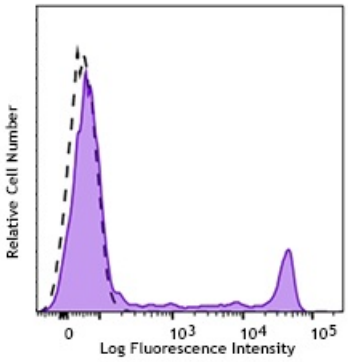
SONY

Product Data Sheet

Brilliant Violet 605™ anti-human CD8a

Catalog # / Size:	2104675 / 25 tests 2104680 / 100 tests
Clone:	HIT8a
Isotype:	Mouse IgG1, κ
Reactivity:	Human, Non-human primate
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Workshop Number:	V CD08.10
Concentration:	Lot-specific



Human peripheral blood lymphocytes were stained with CD8a (clone HIT8a) Brilliant Violet 605™ (filled histogram) or mouse IgG1, κ Brilliant Violet 605™ isotype control (open histogram).

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. Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605™ is a trademark of Sirigen Group Ltd. 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.
Application Notes:	Clone HIT8a recognizes the alpha chain of CD8[5]. It does not block the binding of RPA-T8 antibody to CD8a. Additional reported applications of this antibody (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections[5,6]. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.

Application References:

1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
2. Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.
3. Barclay N, *et al.* 1997. The Leucocyte Antigen Facts Book. Academic Press Inc. San Diego.
4. Awasthi, S., *et al.* 2011. *J. Virol* 85:10472. PubMed
5. Coppieters KT, *et al.* 2012. *J. Exp. Med.* 209:51. (IHC, epitope)
6. Suzuki F, *et al.* 2012. *Arthritis Res. Ther.* 14:R48. (IHC)

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 α_3 domain of MHC class I and the cytoplasmic CXCP motif binds the tyrosine kinase p56 Lck.

Antigen References: 1. Barclay N, *et al.* 1993. The Leucocyte Antigen FactsBook. Academic Press Inc. San Diego.