

Technical Data Sheet

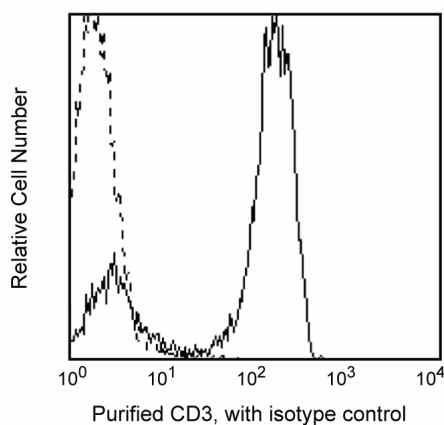
Biotin Mouse Anti-Human CD3**Product Information**

Material Number:	555338
Size:	100 tests
Vol. per Test:	20 µl
Clone:	HIT3a
Isotype:	Mouse IgG2a, κ
Reactivity:	QC Testing: Human
Workshop:	V 5T-CD03.05
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with the human ε-chain, a 20 kDa subunit of CD3/T cell antigen receptor complex found on 70-80% of normal human peripheral blood lymphocytes and 60-85% of thymocytes. Studies from the HLDA Workshop show this antibody to be mitogenic when used in conjunction with pokeweed mitogen. CD3 plays a role in signal transduction during antigen recognition. HIT3a antibody does not stain intracellular CD3 unlike the other CD3 clone, UCHT1.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of peripheral blood lymphocytes analyzed on a FACScan (BDIS, San Jose, CA)

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes**Application**

Flow cytometry	Routinely Tested
Functional assay	Tested During Development
Immunohistochemistry-frozen	Tested During Development

Recommended Assay Procedure:

For use of this antibody in immunohistochemical staining of tissue sections, Cat. No. 550367 is recommended. For functional assays, our no azide, low endotoxin (NA/LE) formulation is recommended, Cat. No. 555336.

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Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
555572	Biotin Mouse IgG2a, κ Isotype Control	100 tests	G155-178

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10⁶ cells in a 100- μ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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- Barclay NA, Brown MH, Birkeland ML, et al, ed. *The Leukocyte Antigen FactsBook*. San Diego, CA: Academic Press; 1997.(Biology)
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- Beverly PC, Callard RE. Distinctive functional characteristics of human "T" lymphocytes defined by E rosetting or a monoclonal anti-T cell antibody. *Eur J Immunol*. 1981; 11(4):329-334.(Biology)
- Guesdon JL, Ternynck T, Avrameas S. The use of avidin-biotin interaction in immunoenzymatic techniques. *J Histochem Cytochem*. 1979; 27(8):1131-1139.(Biology)
- Lanier LL, Allison JP, Phillips JH. Correlation of cell surface antigen expression on human thymocytes by multi-color flow cytometric analysis: implications for differentiation. *J Immunol*. 1986; 137(8):2501-2507.(Biology)