CD8a Monoclonal Antibody (OKT8 (OKT-8)), NovaFluor™ Yellow 730, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	OKT8 (OKT-8)
Conjugate	NovaFluor™ Yellow 730
Excitation/Emission Max	551/730 nm
Form	Liquid
Concentration	4 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	4 µL (0.5 µg)/test	-

Product Specific Information

Description: The OKT8 monoclonal antibody reacts with the human CD8a molecule, an approximately 32-34 kDa cell surface receptor expressed either as a heterodimer with the CD8 beta chain (CD8 alpha beta) or as a homodimer (CD8 alpha alpha). A majority of thymocytes and a subpopulation of mature T cells and NK cells express CD8a. CD8 binds to MHC class I and through its association with protein tyrosine kinase p56lck plays a role in T-cell development and activation of mature T cells. Preliminary testing indicates that OKT8 and two other mouse anti-human CD8 antibodies (clone RPA-T8, Product # 14-0088 and clone HIT8a, Product # 14-0089) do not compete with each other for binding to human peripheral blood leukocytes by flow cytometric analysis, suggesting that they do not bind to similar epitopes or block each other by steric hindrance.

Each product contains 1 vial of NovaFluor conjugate and 1 vial of CellBlox Plus Blocking Buffer.

Applications Reported: This OKT8 (OKT-8) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This OKT8 (OKT-8) antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 4 µL (0.5 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

NovaFluor dyes are not compatible with DNA intercalating viability dyes. Do not use viability dyes such as propidium iodide, 7-actinomycin D (7-AAD) and DAPI. Invitrogen LIVE/DEAD Fixable Dead Cell stains are recommended for use with NovaFluor dyes.

This NovaFluor conjugate has been updated to ship with CellBlox Plus Blocking Buffer (Cat. No. (C001T06F01). This buffer contains formulation improvements over CellBlox. CellBlox Plus Blocking Buffer is required for optimal staining with NovaFluor conjugates and should be used in all experiments where NovaFluor conjugates are used. Whenever possible, we recommend adding CellBlox Plus Blocking Buffer to antibody cocktails/master mixes prior to combining with cells. Add 5 µL per sample

(regardless of the number of NovaFluors in your panel) to use the antibody cocktail as intended. For single-color controls, use 5 µL of CellBlox Blocking Buffer per 100 µL of cell sample containing 10^3 to 10^8 cells.

NovaFluor conjugates are based on Phiton™ technology utilizing novel nucleic acid dye structures that allow for engineered fluorescent signatures with consideration for spillover and spread impacts. Learn more

Excitation: 552 nm; Emission: 718 nm; Laser: 561 nm (Yellow) Laser

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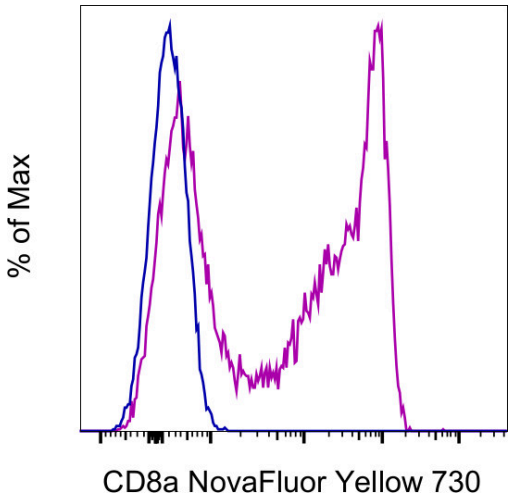
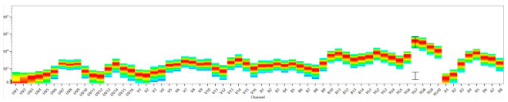
Product Images For CD8a Monoclonal Antibody (OKT8 (OKT-8)), NovaFluor™ Yellow 730, eBioscience™



CD8a Antibody (H003T03Y07-A) in Flow
Normal human PBMCs were either left unstained (blue histogram) or stained with CD8a Monoclonal Antibody, NovaFluor Yellow 730 (purple histogram) and acquired in the YG7 channel on a 5-laser Cytek Aurora. Cells in the lymphocyte gate were used in the analysis.



CD8a Antibody (H003T03Y07-A) in Flow
Spectral signature for NovaFluor Yellow 730 collected on a 5-laser Cytek Aurora Full Spectrum flow cytometer using Cytek assay settings. Human peripheral blood mononuclear cells were stained with anti-human CD4 (SK3) and signatures displayed following gating on the lymphocyte population.