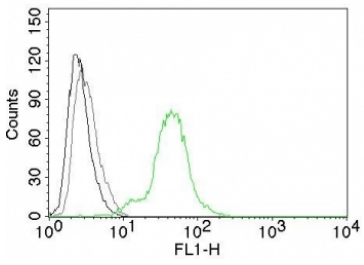
Estrogen Receptor beta Antibody CF488 Conjugate [clone ERb455] (V2115CF488)

Catalog No.	Formulation	Size
V2115CF488-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	CF488 Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	ERb455
Purity	Protein G affinity chromatography
UniProt	Q92731
Applications	Flow Cytometry : 5ul per test per one 10^6 cells in 0.1ml or 5ul per 100ul of whole blood
Limitations	This Estrogen Receptor beta Antibody CF488 Conjugate is available for research use only.



Estrogen Receptor beta Antibody CF488 Conjugate FACS. Flow cytometry analysis of human BT474 cells with Estrogen Receptor beta antibody: Black=cells alone; Gray=isotype control; Green=Estrogen Receptor beta antibody.

Description

Estrogen Receptor beta antibody CF488 conjugate clone ERb455 is a monoclonal antibody specific for estrogen receptor beta, also called ESR2, labeled with CF488 to provide bright green fluorescence and excellent photostability. Estrogen receptor beta is a transcription factor expressed in ovary, prostate, lung, brain, and immune cells, where it influences growth regulation, hormone signaling, and cellular differentiation. NSJ Bioreagents offers this CF488 conjugated antibody for use in immunofluorescence, confocal microscopy, and flow cytometry applications requiring strong and stable green fluorescence.

Estrogen receptor beta has drawn attention in cancer biology as a receptor that frequently opposes the proliferative drive of estrogen receptor alpha. By detecting estrogen receptor beta with clone ERb455, researchers are able to distinguish receptor positive subsets within tumors and evaluate how receptor status affects disease progression and therapy outcomes. The CF488 conjugate produces clear nuclear localization in receptor expressing cells and integrates seamlessly into multicolor experimental panels.

In neuroscience, estrogen receptor beta antibody CF488 conjugate clone ERb455 has been employed in studies of synaptic plasticity, cognitive regulation, and mood stabilization. The green fluorescence output is particularly advantageous in imaging studies, where it combines with red and blue fluorochromes to map receptor distribution across neuronal populations. This helps researchers evaluate how estrogen signaling contributes to neuroprotection and recovery following injury or disease.

Cardiovascular and immune system research also benefit from estrogen receptor beta antibody CF488 conjugate clone ERb455. In vascular biology, ER beta regulates endothelial and smooth muscle cell function, contributing to vascular tone and atheroprotection. In immune studies, it influences inflammatory signaling, making it a focus in autoimmune disease models. This conjugated antibody has been validated for multiple platforms, providing flexibility for diverse research needs.

The CF488 dye provides intense green fluorescence with high resistance to photobleaching, ensuring stable signals during long imaging sessions. Direct conjugation simplifies workflows by eliminating secondary antibody steps while maintaining high sensitivity. Alternate names include ESR2 antibody CF488 conjugate, nuclear receptor ESR2 antibody CF488, and ER beta antibody CF488 conjugate.

For studying ESR2-mediated hormone signaling and tumor modulation, see our unlabeled Estrogen Receptor beta antibody (clone ERb455).

Application Notes

Optimal dilution of the Estrogen Receptor beta Antibody CF488 Conjugate should be determined by the researcher.

Immunogen

The C-terminus fragment of recombinant human Estrogen Receptor beta protein was used as the immunogen for this antibody.

Storage

Store the Estrogen Receptor beta antibody at 2-8oC, protected from light.