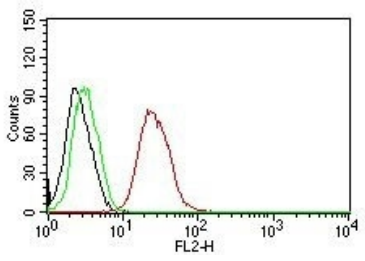
Estrogen Receptor beta Antibody PE Conjugate [clone ERb455] (V2115PE)

Catalog No.	Formulation	Size
V2115PE-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	PE Conjugate
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	ERb455
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
UniProt	Q92731
Gene ID	2100 (Human)
Localization	Predominantly nuclear
Applications	Flow Cytometry : 5ul/test/million cells or 5ul/test/100ul of whole blood Immunofluorescence : 1:50-1:100 for 30 minutes at RT (1)
Limitations	This **Estrogen Receptor beta antibody** is available for research use only.



FACS testing of human MCF-7 cells with Estrogen Receptor beta antibody (PE conjugate): Black=cells alone; Green=isotype control; Red=Estrogen Receptor beta antibody

Description

Estrogen Receptor beta antibody PE conjugate clone ERb455 is a monoclonal antibody designed to detect estrogen receptor beta, also known as ESR2, with direct conjugation to phycoerythrin for strong red orange fluorescence. Estrogen receptor beta is a nuclear receptor expressed in reproductive tissues, cardiovascular cells, neurons, and immune

populations, where it regulates transcriptional activity, development, and tissue maintenance. NSJ Bioreagents provides this PE conjugated antibody for researchers who require bright fluorescence and reliable detection of estrogen receptor beta in complex assays.

Estrogen receptor beta is increasingly recognized as a critical regulator of cellular growth and differentiation. While estrogen receptor alpha often drives proliferation, estrogen receptor beta can counterbalance this by exerting anti proliferative and tumor suppressive functions. Estrogen receptor beta antibody PE conjugate clone ERb455 has been widely used in cancer studies, where receptor status is linked to tumor behavior and treatment response. This antibody produces clear nuclear staining in receptor positive tumor cells and is particularly useful for flow cytometry and fluorescence microscopy, where sensitivity and specificity are essential.

In oncology, researchers apply estrogen receptor beta antibody PE conjugate clone ERb455 to examine breast, ovarian, and prostate tumors. Its bright phycoerythrin label enables detection of receptor positive cells even in heterogeneous tissue samples. The antibody supports investigations into the protective role of estrogen receptor beta, which has been associated with improved clinical outcomes and reduced aggressiveness in certain cancers.

Beyond cancer, this conjugated antibody has applications in neuroscience, where estrogen receptor beta contributes to synaptic plasticity, cognitive function, and neuroprotection. In neurodegenerative research, it has been used to study receptor distribution in brain tissue, providing insight into how estrogen pathways influence disease progression. Cardiovascular studies also benefit, as estrogen receptor beta regulates vascular tone and provides protection against vascular injury.

Technically, the phycoerythrin conjugation delivers intense red orange fluorescence with minimal background, making this antibody well suited for multiparameter flow cytometry panels. Its direct conjugation reduces assay time by eliminating the need for secondary antibodies while maintaining high signal fidelity. Alternate names include ESR2 antibody PE conjugate, nuclear receptor ESR2 antibody PE, and ER beta antibody PE conjugate.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Estrogen Receptor beta antibody to be titered up or down for optimal performance.

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 2-8'C. Conjugate is light sensitive, store in the dark.

Alternate Names

Erb, ESR BETA, ESR2, ESRB, ESTRB, estrogen nuclear receptor beta variant a, estrogen nuclear receptor beta variant b, estrogen receptor 2 (ER beta), estrogen receptor beta 4, Estrogen receptor beta antibody

References (1)