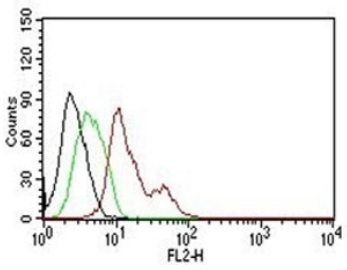
ER Antibody PE Conjugate / Estrogen Receptor alpha PE Conjugate [clone ER506] (V2113PE)

Catalog No.	Formulation	Size
V2113PE-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. Other species not known.
Format	PE Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ER506
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	2099
Localization	Intracellular, Nuclear
Applications	Flow Cytometry: 5ul/test/10e6 cells in 100ul or 5ul/test/100ul of whole blood
Limitations	This ER Antibody PE Conjugate is available for research use only.



ER Antibody PE Conjugate FACS. Flow cytometry testing of human MCF-7: Black=cells alone; Green=isotype control; Red= PE conjugated Estrogen Receptor antibody.

Description

ER Antibody PE Conjugate clone ER506 recognizes Estrogen receptor alpha, a ligand-activated nuclear hormone receptor encoded by the ESR1 gene on chromosome 6q25.1. Estrogen receptor alpha is a member of the nuclear

receptor superfamily and functions as a transcription factor regulating genes involved in cell proliferation, differentiation, and reproductive tissue development. The PE conjugated format enables direct fluorescence-based detection of Estrogen receptor expression in research applications.

Estrogen receptor alpha, commonly referred to as ER alpha, mediates the biological effects of estrogens by binding to estrogen response elements within target gene promoters. Upon ligand binding, ESR1 undergoes conformational changes that promote dimerization, nuclear localization, and recruitment of transcriptional coactivators or corepressors. The receptor contains distinct functional domains including a DNA-binding domain with zinc finger motifs, a ligand-binding domain, and activation function regions that coordinate transcriptional regulation.

Estrogen receptor expression is most prominent in breast epithelium, endometrium, ovary, and other hormone-responsive tissues. In oncology research, ESR1 expression is a key biomarker in breast carcinoma and other hormone-dependent malignancies. Alterations in receptor signaling, amplification, or mutation of ESR1 can influence tumor growth dynamics and endocrine responsiveness.

The PE fluorophore conjugation of clone ER506 allows for direct detection without secondary antibody amplification, supporting fluorescence-based assays requiring rapid and specific signal detection. This ER Antibody PE Conjugate targets ESR1 protein in research applications involving flow cytometry, cell sorting, or other fluorescence-based analytical methods.

For comprehensive detection of Estrogen receptor alpha across hormone signaling and breast cancer studies, see our Estrogen Receptor alpha antibody (clone ESR1/3557).

Application Notes

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

Immunogen

Recombinant human Estrogen Receptor alpha protein (aa 2-185) was used as the immunogen for this antibody.

Storage

Store the ER Antibody PE Conjugate at 2-8oC. Conjugate is light sensitive, store in the dark.

References (2)

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