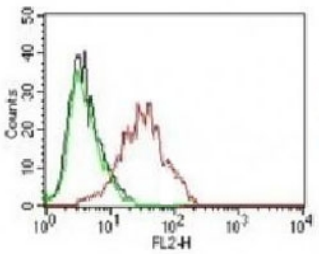
# Estrogen Receptor Antibody PE Conjugate [clone NR3Ga-3] (V7061PE)

| Catalog No. | Formulation | Size |
|---|---|---|
| V7061PE-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** | NR3Ga-3 |
| **Purity** | Protein G affinity chromatography |
| **Buffer** | 1X PBS, pH 7.4 |
| **Gene ID** | 2099 (Human) |
| **Localization** | Intracellular, Nuclear |
| **Applications** | Flow Cytometry : 5ul/test/million cells or 5ul/test/100ul of whole blood |
| **Limitations** | This Estrogen Receptor antibody is available for research use only. |




Intracellular FACS testing of human MCF-7 cells: Black=cells alone; Green=isotype control; Red=Estrogen Receptor antibody PE conjugate.

## Description

Estrogen Receptor Antibody PE Conjugate clone NR3Ga-3 recognizes Estrogen receptor alpha, a ligand-activated nuclear transcription factor encoded by the ESR1 gene on chromosome 6q25.1. Estrogen receptor alpha belongs to the nuclear receptor superfamily and regulates gene expression in response to estrogen signaling. The PE conjugated format

allows direct fluorescence-based detection of Estrogen receptor expression in research applications.

Estrogen receptor alpha, frequently referred to as ER alpha or ESR1 antibody target protein in the literature, functions through binding to estrogen response elements within promoter regions of target genes. Upon ligand engagement, the receptor undergoes conformational changes that promote dimerization, nuclear localization, and recruitment of transcriptional coactivators or corepressors. Structurally, ESR1 contains a DNA-binding domain with zinc finger motifs, a ligand-binding domain, and activation function regions that coordinate transcriptional control of hormone-responsive genes.

Expression of Estrogen receptor alpha is highest in breast epithelium, endometrial tissue, ovary, and other hormone-responsive organs. In oncology research, ESR1 expression is widely studied in breast carcinoma and additional hormone-dependent tumors, where receptor status influences cellular proliferation and endocrine responsiveness. Altered ESR1 signaling or mutation can impact tumor biology and therapeutic response pathways.

The PE fluorophore conjugation of clone NR3Ga-3 supports direct signal detection without secondary antibody amplification, enabling efficient analysis in fluorescence-based assays. This Estrogen Receptor Antibody PE Conjugate targets ESR1 protein in research applications involving flow cytometry, cell sorting, or other fluorescence-based detection methods.

## 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 Estrogen Receptor antibody PE conjugate.

## Storage

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