

Recombinant ER protein

Catalog No: 31119

Lot No: 02717007

Expressed In: Baculovirus

Quantity: 4 µg

Concentration: 0.2 µg/µl

Source: Human

Buffer Contents: 4 µg of Recombinant ER protein and Dilution Buffer AM1 (20 mM Tris-Cl (pH 8), 20% glycerol, 100 mM KCl, 1 mM DTT and 0.2 mM EDTA).

Background: **Estrogen receptors (ER)** are **nuclear hormone receptors** that mediate the actions of the endogenous steroid hormone, 17β-estradiol (E2). ER is synthesized as two protein forms, ERα and ERβ, which can bind to the estrogen receptor element (ERE) as homo- or heterodimers. Cell proliferation and differentiation triggered by ER activation has been heavily studied in bone-wasting and breast cancer treatments. Estrogen receptors are necessary for sexual development and reproductive function.

Protein Details: Recombinant ER is specific for the ER alpha subunit and was expressed from full length (accession number NM 000125) with an N-terminal His-Tag in a baculovirus system and purified by an affinity column in combination with FPLC chromatography. The purified recombinant protein is greater than 90% homogeneous and contains no detectable protease, DNase and RNase activity.

Application Notes: Recombinant ER is suitable for DNA and protein-protein interaction assays. 20-100 ng are sufficient for *in vitro* transcription assays and 100 ng are sufficient for protein-protein interaction studies. The molecular weight of the protein is ~64 kDa. This protein is not recommended for use in TransAM®.

NOTE: The presence of Poly [d(I-C)] in buffers may affect protein functionality and should be avoided.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.