



Recombinant Protein Technical Manual  
Recombinant Human Estrogen Receptor  $\alpha$ /ER alpha  
Protein (His Tag)  
RPES3303

#### Product Data:

**Product SKU:** RPES3303

**Size:** 10 $\mu$ g

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P03372

#### Protein Information:

**Molecular Mass:** 14.4 kDa

**AP Molecular Mass:** 14 kDa

**Tag:** N-6His

**Bio-activity:**

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per  $\mu$ g as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2  $\mu$ m filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Estrogen Receptor; ER; ER-Alpha; Estradiol Receptor; Nuclear Receptor Subfamily 3 Group A Member 1; ESR1; ESR; NR3A1

## Immunogen Information:

**Sequence:** Met 1-Gln116

## Background:

Estrogen Receptor is a major ligand-activated transcription factor belonging to the nuclear hormone receptor superfamily. Estrogen Receptor is composed of several domains important for hormone binding, DNA binding, and activation of transcription. The protein localizes to the nucleus where it may form a homodimer or a heterodimer with estrogen receptor 2. Estrogen and its receptors are essential for sexual development and reproductive function, but they also play a role in other tissues such as bone. Estrogen receptors are also involved in pathological processes including breast cancer, endometrial cancer, and osteoporosis. Alternative splicing results in several transcript variants, which differ in their 5' UTRs and use different promoters.