

## Recombinant Protein Technical Manual

# Recombinant Human Estrogen Receptor $\beta$ /ER beta Protein (His Tag)

RPES3323

**Product Data:** 

**Product SKU:** RPES3323 **Size:** 10μg

Species: Human Expression host: E. coli

**Uniprot:** Q92731-3

#### **Protein Information:**

Molecular Mass: 38.1 kDa

AP Molecular Mass: 35 kDa

Tag: N-6His

**Bio-activity:** 

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

**Endotoxin:** < 1.0 EU per μg 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 µm filtered solution of 50mM TrisHCl, pH8.0.

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

**Application:** 

**Synonyms:** Estrogen Receptor Beta; ER-Beta; Nuclear Receptor Subfamily 3 Group A Member

2; ESR2; ESTRB; NR3A2

### Immunogen Information:

Sequence: Met 1-Ala323

#### **Background:**

Estrogen Receptor Beta (ESR2) is a nuclear protein that belongs to the nuclear hormone receptor family of NR3 subfamily. It contains one nuclear receptor DNA-binding domain and is expressed in many tissues at a lower level. ESR2 is a nuclear hormone receptor. It binds estrogens with an affinity similar to that of ESR1 and activates expression of reporter genes containing estrogen response elements (ERE) in an estrogen-dependent manner. DNA-binding by ESR1 and ESR2 is rapidly lost at 37 degrees Celsius in the absence of ligand while in the presence of 17 beta-estradiol and 4-hydroxy-tamoxifen loss in DNA-binding at elevated temperature is more gradual.