

## Estrogen Receptor $\alpha$ antibody (pAb)

**Catalog Nos:** 65715, 65915, 65716

**RRID:** AB\_3216295

**Application(s):** ChIP, WB

**Reactivity:** Human

**Quantities:** 100  $\mu$ g, 50  $\mu$ g, 10  $\mu$ g

**Purification:** Protein A Chromatography

**Host:** Rabbit

**Isotype:** IgG

**Molecular Weight:** 66 kDa

**Background:** ER- $\alpha$  (estrogen receptor  $\alpha$ ) is a ligand-activated transcription factor composed of several domains important for hormone binding, DNA binding and activation of transcription. ER- $\alpha$  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 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.

**Immunogen:** This ER $\alpha$  antibody was immunized with a peptide corresponding to amino acid residues of human ER $\alpha$ .

**Buffer:** Purified antibody in PBS containing 30% glycerol and 0.05% sodium azide. Sodium azide is highly toxic.

### Application Notes:

Applications Validated by Active Motif:

ChIP-Seq: 5  $\mu$ g each

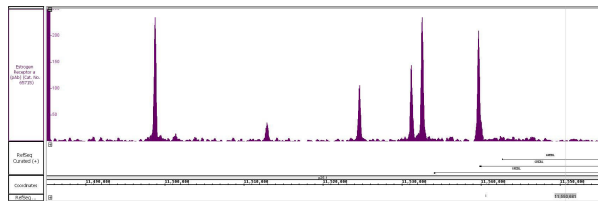
WB: 0.5 - 2  $\mu$ g/ml

\*Note: Many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western Blot. For optimal results in Western blotting, primary antibody incubations should be performed at room temperature. Individual optimization may be required.

For Estrogen Receptor  $\alpha$ , we also offer Estrogen Receptor  $\alpha$  Antibody (mAb). For details, see Catalog No. 61035.

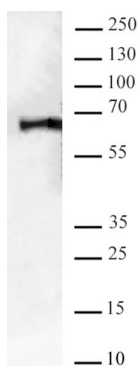
**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

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



### Estrogen Receptor $\alpha$ antibody (pAb) tested by ChIP-Seq.

ChIP was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 40  $\mu$ g of chromatin from MCF7 estradiol treated cells and 5  $\mu$ g of antibody. ChIP DNA was sequenced on the Illumina HiSeq and 9M sequence tags were mapped to identify ERalpha binding sites across a region of chromosome 2.



### Estrogen Receptor $\alpha$ antibody (pAb) tested by Western blot.

MCF7 Estradiol treated nuclear extract (20  $\mu$ g per lane) was probed with Estrogen Receptor  $\alpha$  antibody (0.5  $\mu$ g/mL).