

For Research Use Only

# ESR2 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 83447-3-PBS



## Basic Information

<b>Catalog Number:</b> 83447-3-PBS	<b>GenBank Accession Number:</b> BC024181	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2100	<b>CloneNo.:</b> 240412F2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q92731	
<b>Isotype:</b> IgG	<b>Full Name:</b> estrogen receptor 2 (ER beta)	
<b>Immunogen Catalog Number:</b> AG5103	<b>Calculated MW:</b> 59 kDa	

## Applications

**Tested Applications:**  
IHC, IF/ICC, FC (Intra), Cytometric bead array, Indirect  
ELISA

**Species Specificity:**  
human, mouse

## Product Information

83447-3-PBS targets ESR2 as part of a matched antibody pair:

MP00441-1: 83447-2-PBS capture and 83447-3-PBS detection (validated in Cytometric bead array)

MP00441-2: 83447-3-PBS capture and 83447-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

Estrogen receptor-beta (ESR2) is a member of the superfamily of nuclear receptors, which can transduce extracellular signals into transcriptional responses. 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.

## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

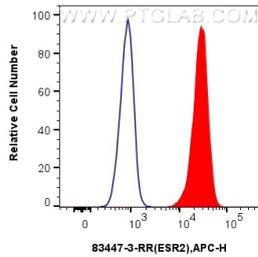
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

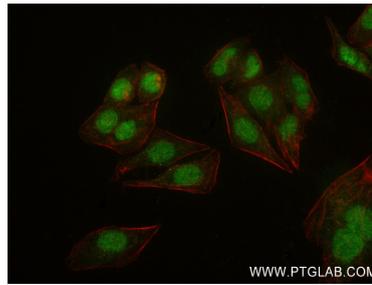
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

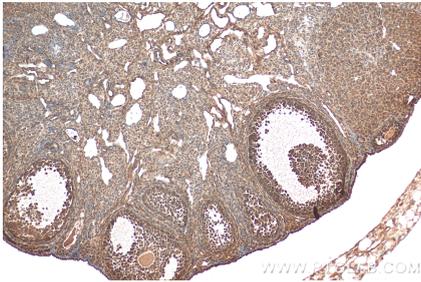
## Selected Validation Data



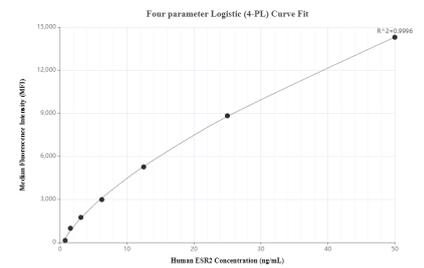
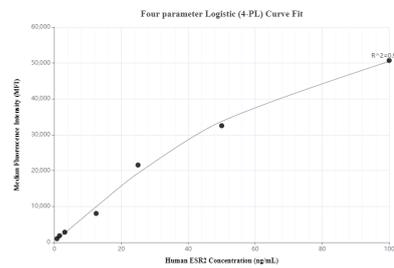
1x10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.25 ug Esr2 Recombinant Antibody (83447-3-RR, Clone:240412F2) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83447-3-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using ESR2 antibody (83447-3-RR, Clone: 240412F2) at dilution of 1:800 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-Phalloidin (red). This data was developed using the same antibody clone with 83447-3-PBS in a different storage buffer formulation.

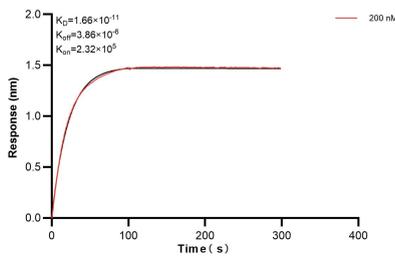


Immunohistochemical analysis of paraffin-embedded mouse ovary tissue slide using 83447-3-RR (ESR2 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83447-3-PBS in a different storage buffer formulation.

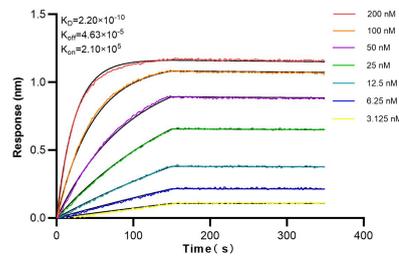


Cytometric bead array standard curve of MP00441-1, ESR2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83447-2-PBS. Detection antibody: 83447-3-PBS. Standard: Ag5103. Range: 0.781-100 ng/mL.

Cytometric bead array standard curve of MP00441-2, ESR2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83447-3-PBS. Detection antibody: 83447-1-PBS. Standard: Ag5103. Range: 0.781-50 ng/mL.



Biolayer interferometry (BLI) kinetic assay of 83447-3-PBS against Human ESR2 was performed. The affinity constant is 16.6 pM.



Biolayer interferometry (BLI) kinetic assays of 83447-3-RR against Human ESR2 were performed. The affinity constant is 0.22 nM.