## Estrogen Receptor Beta 1 Monoclonal Mouse Antibody (ESR2/3207)



## **Product Description**

Estrogen receptors (ER) are members of the steroid/thyroid hormone receptor superfamily of ligand-activated transcription factors. Estrogen receptors, including ER-alpha and ER-beta, contain DNA binding and ligand binding domains and are critically involved in regulating the normal function of reproductive tissues. They are located in the nucleus, though some estrogen receptors associate with the cell surface membrane and can be rapidly activated by exposure of cells to estrogen. ER-alpha and ER-beta are differentially activated by various ligands. Receptor-ligand interactions trigger a cascade of events, including dissociation from heat shock proteins, receptor dimerization, phosphorylation and the association of the hormone activated receptor with specific regulatory elements in target genes. Evidence suggests that ER-alpha and ER-beta may be regulated by distinct mechanisms even though they share many functional characteristics.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 3207, Anti-ER-beta-1 (ESR2/3207)

## Product attributes

**Tumor expression** 

Product attributes		
Antibody number	#3207	
Antibody reactivity (target)	ER-beta-1	
Antibody type	Primary	
Host species	R-beta-1 imary ouse onoclonal SR2/3207 G2b, kappa 3-59 kDa b; ESR BETA; ESR2; ESRB; ESTRB; estrogen nuclear ceptor beta variant a; estrogen nuclear receptor beta variant b; trogen receptor 2 (ER beta); estrogen receptor beta variant b; trogen receptor 2 (ER beta); estrogen receptor beta variant b; trogen receptor 2 (ER beta); estrogen receptor beta 4 SR2 00 92731 90607 90707 90708	
Clonality	Monoclonal	
Clone	ESR2/3207	
Isotype	IgG2b, kappa	
Molecular weight	53-59 kDa	
Synonyms	Erb; ESR BETA; ESR2; ESRB; ESTRB; estrogen nuclear receptor beta variant a; estrogen nuclear receptor beta variant b; estrogen receptor 2 (ER beta); estrogen receptor beta 4	
Human gene symbol	ESR2	
Entrez gene ID	2100	
SwissProt	Q92731	
Unigene	660607	
Immunogen	Recombinant full-length human ESR2 protein	
Antibody target cellular localization	Nucleus	
Species reactivity	Human	
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry	
Positive control	Ovarian, breast, bladder, gastric or salivary carcinoma (IHC).	
Shipping condition	Room temperature	
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C	
Regulatory status	For research use only (RUO)	
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide	
Validated in protein array	Monospecific	
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended	
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.	

Breast cancer

Call us: 800-304-5357 Email: techsupport@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on August 20, 2025 at 10:48:59 PM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/estrogen-receptor-beta-1-monoclonal-mouse-antibody-esr2-3207/