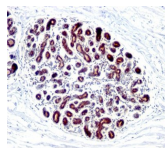


## pS2 / pNR-2 / TFF1 Monoclonal Mouse Antibody (GE2)



### Product Description

This antibody recognizes a polypeptide of 6.5 kDa, identified as pS2 estrogen-regulated protein. Its epitope is localized between aa57-84 of human pS2 protein. pS2 is a trefoil peptide. Trefoil peptides are protease resistant molecules secreted throughout the gut that play a role in mucosal healing. These peptides contain three intra-chain disulfide bonds, forming the trefoil motif, or P-domain. pS2 is known to form dimers and this dimerization is thought to play a role in its protective and healing properties. About 60% of breast carcinomas are positive for pS2. Staining is cytoplasmic, often with localization to the Golgi apparatus. pS2 is shown to be localized in normal stomach mucosa, gastric fluid, goblet cells in the colon and small intestine, and in ulcerations of the gastrointestinal tract. Several studies have shown that pS2 is primarily expressed in estrogen receptor-positive breast tumors and it may define a subset of estrogen-dependent tumors that displays an increased likelihood of response to endocrine therapy. 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 [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 0677, Anti-pS2 (GE2)**

### Product attributes

Antibody number	#0677
Antibody reactivity (target)	pS2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	GE2
Isotype	IgG1, kappa
Molecular weight	6.5 kDa
Synonyms	BCEI, Breast Cancer Estrogen Inducible Protein, Gastrointestinal Trefoil Protein, Gastrointestinal trefoil protein pS2, HP1A, HPS2, pNR2, TFF1, Trefoil Factor 1
Human gene symbol	TFF1
Entrez gene ID	7031
SwissProt	P04155
Unigene	162807
Immunogen	Synthetic peptide of 28 amino acid residues corresponding to CFDDTVRGVPWCFYPNTIDVPPEEECF (aa57-84) from the C-terminus of human pS2.
Antibody target cellular localization	Cytoplasmic, Golgi apparatus
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Cynomolgus monkey, Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Immunohistology (formalin). Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	Breast or Ovarian carcinoma
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
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
Antibody research areas	Endocrinology
Cell/tissue expression	Epithelial cells
Tumor expression	Breast cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
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

### Dye Features

[CF®405S Features](#)  
[CF®488A Features](#)  
[CF®568 Features](#)  
[CF®594 Features](#)  
[CF®640R Features](#)  
[CF®647 Features](#)

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