

36-3231: Anti-pS2 / pNR-2 / TFF1 (Estrogen-Regulated Protein) Monoclonal Antibody(Clone: TFF1/2133)

Clonality :	Monoclonal
Clone Name :	TFF1/2133
Application :	FACS,IF,IHC
Reactivity :	Human
Gene :	TFF1
Gene ID :	7031
Uniprot ID :	P04155
Alternative Name :	BCEI, Breast Cancer Estrogen Inducible Protein, Gastrointestinal Trefoil Protein, Gastrointestinal trefoil protein pS2, HP1A, HPS2, pNR2, TFF1, Trefoil Factor 1
Isotype :	Mouse IgG2b, kappa
Immunogen Information :	Recombinant full-length human TFF1 protein

Description

It recognizes a polypeptide of 6.5kDa, identified as pS2 estrogen-regulated protein. Its epitope is located in the c-terminus 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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Flow Cytometry (1-2ug/million cells); ,Immunofluorescence (1-2ug/ml);,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

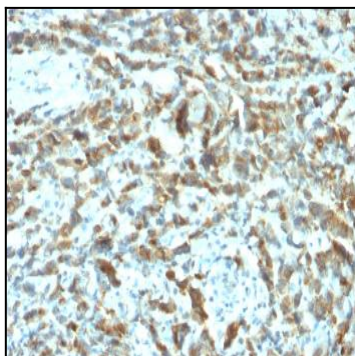


Fig. 1: Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with TFF1/pS2 Mouse Monoclonal Antibody (TFF1/2133).

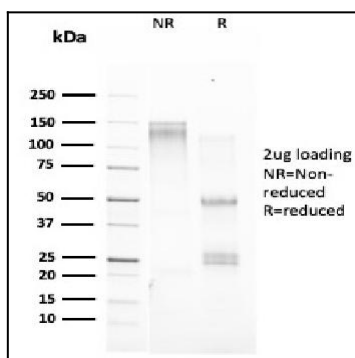


Fig. 2: SDS-PAGE Analysis Purified TFF1/pS2 Mouse Monoclonal Antibody (TFF1/2133). Confirmation of Purity and Integrity of Antibody.

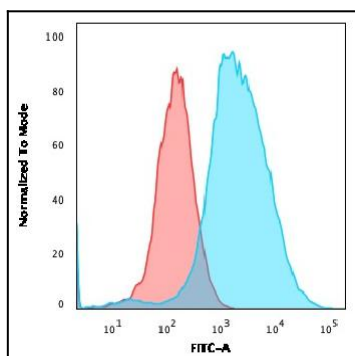


Fig. 3: Flow Cytometric Analysis of PFA-fixed MCF-7 cells using TFF1/pS2 Mouse Monoclonal Antibody (TFF1/2133) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

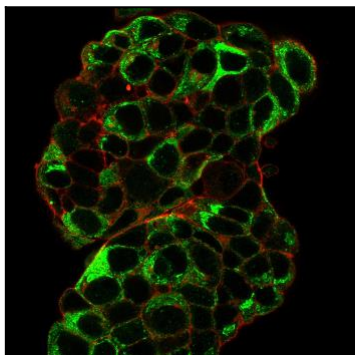


Fig. 4: Immunofluorescence staining of paraformaldehyde-fixed MCF-7 cells with TFF1/pS2 Mouse Monoclonal Antibody (TFF1/2133) followed by goat anti-Mouse IgG-CF488 (Green). Membranes are labeled with phalloidin (Red).

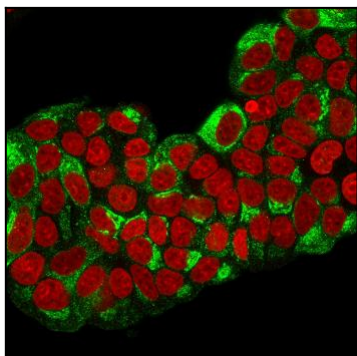


Fig. 5: Immunofluorescence staining of paraformaldehyde-fixed MCF-7 cells with TFF1/pS2 Mouse Monoclonal Antibody (TFF1/2133) followed by goat anti-Mouse IgG-CF488 (Green). Nucleus is labeled with Reddot(Red).

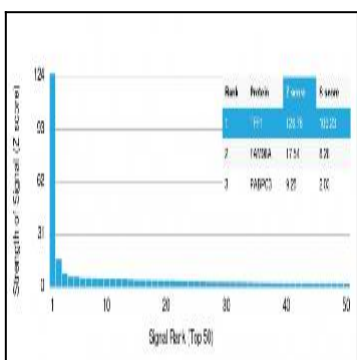


Fig. 6: Analysis of Protein Array containing more than 19,000 full-length human proteins using TFF1/pS2 Mouse Monoclonal Antibody (TFF1/2133). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.