

pS2 (FL-84): sc-28925

BACKGROUND

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, also designated Md2, BCEI, TFF1 and pNR-2, is a trefoil protein that is highly expressed in normal gastric mucosa. pS2 has also been detected in a number of carcinomas including cancers of the breast, pancreas and stomach. pS2 is not present in normal breast tissue but is inducible by estrogen in MCF-7 cells. pS2 is known to form dimers, and this dimerization is thought to play a role in its protective and healing properties. The gene encoding pS2 maps to human chromosome 21q22.3.

CHROMOSOMAL LOCATION

Genetic locus: TFF1/TFF2 (human) mapping to 21q22.3.

SOURCE

pS2 (FL-84) is a rabbit polyclonal antibody raised against amino acids 1-84 representing full length pS2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

pS2 (FL-84) is recommended for detection of precursor and mature pS2 and, to a lesser extent trefoil factor 2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of pS2: 7-12 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or pS2 (h): 293T Lysate: sc-115008.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

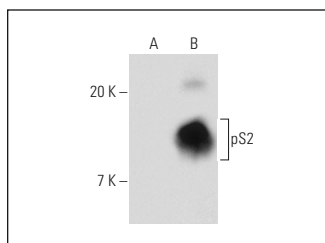
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

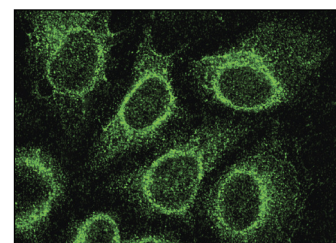
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



pS2 (FL-84): sc-28925. Western blot analysis of pS2 expression in non-transfected: sc-117752 (A) and human pS2 transfected: sc-115008 (B) 293T whole cell lysates.



pS2 (FL-84): sc-28925. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Woodfield, G.W., et al. 2007. TFAP2C controls hormone response in breast cancer cells through multiple pathways of estrogen signaling. *Cancer Res.* 67: 8439-8443.
- Papoutsis, Z., et al. 2007. Deoxybenzoins are novel potent selective estrogen receptor modulators. *Steroids* 72: 693-704.
- Bittencourt, D., et al. 2008. Cotranscriptional splicing potentiates the mRNA production from a subset of estradiol-stimulated genes. *Mol. Cell. Biol.* 28: 5811-5824.
- Gionet, N., et al. 2009. NFκB and estrogen receptor α interactions: Differential function in estrogen receptor-negative and -positive hormone-independent breast cancer cells. *J. Cell. Biochem.* 107: 448-459.
- Wortham, N.C., et al. 2009. The DEAD-box protein p72 regulates ERα-/oestrogen-dependent transcription and cell growth, and is associated with improved survival in ERα-positive breast cancer. *Oncogene* 28: 4053-4064.
- Hernández, C., et al. 2009. Induction of trefoil factor TFF1, TFF2 and TFF3 by hypoxia is mediated by hypoxia inducible factor-1: implications for gastric mucosal healing. *Br. J. Pharmacol.* 156: 262-272.
- Jones, L.P., et al. 2010. Loss of BRCA1 leads to an increased sensitivity to Bisphenol A. *Toxicol. Lett.* 199: 261-268.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **pS2 (A-10): sc-271464** or **pS2 (A-8): sc-390889**, our highly recommended monoclonal alternatives to pS2 (FL-84).