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pS2 / pNR-2 / Trefoil Factor 1 (Estrogen-Regulated Protein) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM313]
Catalog # AH12380

Product Information

Application	IHC, IF, FC
Primary Accession	P04155
Other Accession	7031, 162807
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	SPM313
Calculated MW	9150

Additional Information

Gene ID	7031
Other Names	Trefoil factor 1, Breast cancer estrogen-inducible protein, PNR-2, Polypeptide P1.A, hP1.A, Protein pS2, TFF1, BCEI, PS2
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	pS2 / pNR-2 / Trefoil Factor 1 (Estrogen-Regulated Protein) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TFF1
Synonyms	BCEI, PS2
Function	Stabilizer of the mucous gel overlying the gastrointestinal mucosa that provides a physical barrier against various noxious agents. May inhibit the growth of calcium oxalate crystals in urine.
Cellular Location	Secreted
Tissue Location	Found in stomach, with highest levels in the upper gastric mucosal cells (at protein level). Detected in goblet cells of the small and large intestine and rectum, small submucosal glands in the esophagus, mucous acini of the

sublingual gland, submucosal glands of the trachea, and epithelial cells lining the exocrine pancreatic ducts but not in the remainder of the pancreas (at protein level) Scattered expression is detected in the epithelial cells of the gallbladder and submucosal glands of the vagina, and weak expression is observed in the bronchial goblet cells of the pseudostratified epithelia in the respiratory system (at protein level). Detected in urine (at protein level). Strongly expressed in breast cancer but at low levels in normal mammary tissue. It is regulated by estrogen in MCF-7 cells. Strong expression found in normal gastric mucosa and in the regenerative tissues surrounding ulcerous lesions of gastrointestinal tract, but lower expression found in gastric cancer (at protein level).

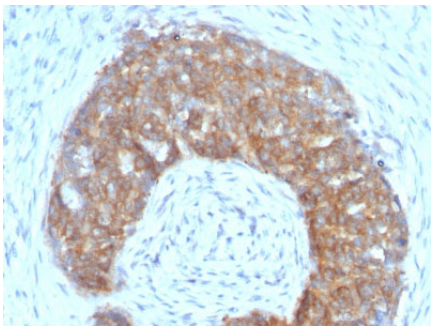
Background

It recognizes a polypeptide of 6.5kDa, 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.

References

Williams R, et. al. Human Pathology, 1996, 27(12):1259-66

Images



Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with pS2 Monoclonal Antibody (SPM313).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.