# abcam

## Product datasheet

## Anti-Estrogen Inducible Protein pS2 antibody [EPR3972] - BSA and Azide free ab239908



## 10 Images

#### Overview

**Product name** Anti-Estrogen Inducible Protein pS2 antibody [EPR3972] - BSA and Azide free

**Description** Rabbit monoclonal [EPR3972] to Estrogen Inducible Protein pS2 - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), IP, ICC/IF, IHC-P, WB

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Human stomach lysate, MCF-7 cell lysate. IHC: Ductal infiltrating breast carcinoma, Ovarian

carcinoma, Human breast carcinoma tissue. IP: MCF7 lysate. Flow cyt: MCF-7 cells. ICC: MCF-7

cells.

General notes ab239908 is the carrier-free version of ab92377.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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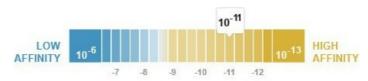
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

**Dissociation constant (K<sub>D</sub>)**  $K_D = 4.70 \times 10^{-11} M$ 



Learn more about K<sub>D</sub>

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

**Purity** Protein A purified

Clonality Monoclonal
Clone number EPR3972

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab239908 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 9 kDa.

#### **Target**

**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.

#### **Tissue specificity**

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).

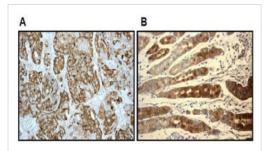
Sequence similarities

**Cellular localization** 

Contains 1 P-type (trefoil) domain.

Secreted.

#### **Images**

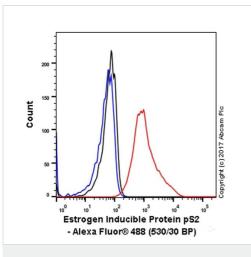


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Estrogen Inducible
Protein pS2 antibody [EPR3972] - BSA and Azide
free (ab239908)

<u>ab92377</u> staining Estrogen Inducible Protein pS2 in Formalin-fixed, Paraffin-embedded Human breast carcinoma tissue (A) and Human stomach tissue (B) at 1/100 dilution. Detection: DAB staining.

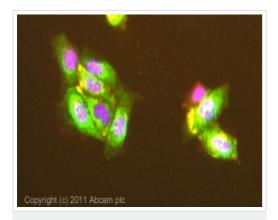
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92377).

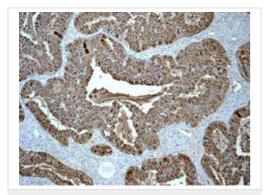


Flow Cytometry (Intracellular) - Anti-Estrogen Inducible Protein pS2 antibody [EPR3972] - BSA and Azide free (ab239908) Intracellular Flow Cytometry analysis of MCF-7 (human breast carcinoma) cells labeling Estrogen Inducible Protein pS2 with unpurified <a href="mailto:ab92377">ab92377</a> at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92377).



Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Inducible Protein pS2 antibody [EPR3972] - BSA and Azide free (ab239908)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Estrogen Inducible
Protein pS2 antibody [EPR3972] - BSA and Azide
free (ab239908)

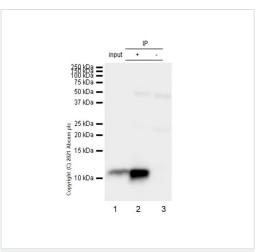
ICC/IF image of <u>ab92377</u> stained MCF7 cells. The cells were 4% formaldehyde (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (<u>ab92377</u>, 1/100 dilution) overnight at +4°C. The secondary antibody (green) was <u>ab96899</u> Dylight 488 goat anti-rabbit  $\lg G$  (H+L) used at a 1/250 dilution for 1h. Alexa Fluor \$\mathbb{8}\$ 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92377</u>).

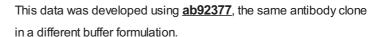
ab92377 showing positive staining in Ovarian carcinoma tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92377).



Immunoprecipitation - Anti-Estrogen Inducible
Protein pS2 antibody [EPR3972] - BSA and Azide
free (ab239908)



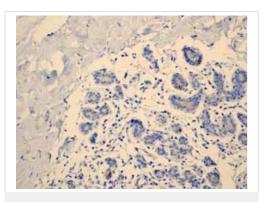
Estrogen Inducible Protein pS2 was immunoprecipitated from 0.35 mg MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate 10 μg with <u>ab92377</u> at 1/50 dilution (2μg). VeriBlot for IP Detection Reagent (HRP)(<u>ab131366</u>) was used at 1/5000 dilution.

Lane 1: MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate 10  $\mu g$ 

Lane 2: abab92377 IP in MCF7 whole cell lysate

Lane 3: Rabbit monoclonal IgG ( $\underline{ab172730}$ ) instead of  $\underline{ab92377}$  in MCF7 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

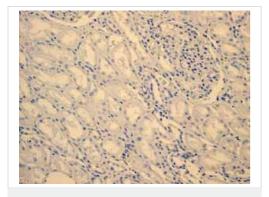


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Estrogen Inducible
Protein pS2 antibody [EPR3972] - BSA and Azide
free (ab239908)

ab92377 showing negative staining in Normal breast tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92377).

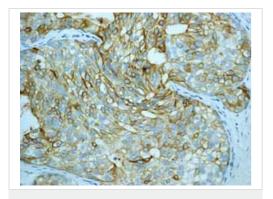


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Estrogen Inducible
Protein pS2 antibody [EPR3972] - BSA and Azide
free (ab239908)

ab92377 showing negative staining in Normal kidney tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab92377).

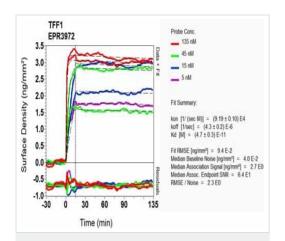


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Estrogen Inducible
Protein pS2 antibody [EPR3972] - BSA and Azide
free (ab239908)

<u>ab92377</u> showing positive staining in Ductal infiltrating breast carcinoma tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

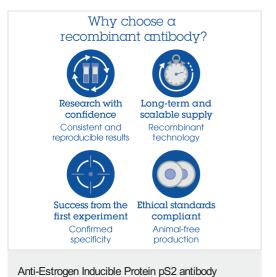
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92377</u>).



Ol-RD Scanning - Anti-Estrogen Inducible Protein pS2 antibody [EPR3972] - BSA and Azide free (ab239908) Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

## Click here to learn more about K<sub>D</sub>

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92377</u>).



[EPR3972] - BSA and Azide free (ab239908)

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