abcam

Product datasheet

Alexa Fluor® 647 Anti-Progesterone Receptor antibody [SP42] ab270198

★★★★★ 1 Abreviews 画像数3

製品の概要

製品名 Alexa Fluor® 647 Anti-Progesterone Receptor antibody [SP42]

製品の詳細 Alexa Fluor® 647 Rabbit monoclonal [SP42] to Progesterone Receptor

由来種 Rabbit

Alexa Fluor® 647. Ex: 652nm, Em: 668nm 標識

アプリケーション 適用あり: ICC/IF, Flow Cyt (Intra)

種交差性 交差種: Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール ICC/IF: T47D cells. Flow Cyt (Intra): T47D cells.

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

- 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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製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 1% BSA, PBS, 30% Glycerol (glycerin, glycerine)

精製度 Protein A/G purified

ポリ/モノ モノクローナル

クローン名 SP42 **アイソタイプ** IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab270198の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/100. This product gave a positive signal in T47D fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).
Flow Cyt (Intra)		1/12500.

ターゲット情報

機能 The steroid hormones and their receptors are involved in the regulation of eukaryotic gene

expression and affect cellular proliferation and differentiation in target tissues. Progesterone receptor isoform B (PRB) is involved activation of c-SRC/MAPK signaling on hormone

stimulation.

 $Isoform\ A: inactive\ in\ stimulating\ c-Src/MAPK\ signaling\ on\ hormone\ stimulation.$

Isoform 4: Increases mitochondrial membrane potential and cellular respiration upon stimulation

by progesterone.

配列類似性 Belongs to the nuclear hormone receptor family. NR3 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

ドメイン Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-

terminal ligand-binding domain.

翻訳後修飾 Phosphorylated on multiple serine sites. Several of these sites are hormone-dependent.

Phosphorylation on Ser-294 occurs preferentially on isoform B, is highly hormone-dependent and modulates ubiquitination and sumoylation on Lys-388. Phosphorylation on Ser-102 and Ser-345 also requires induction by hormone. Basal phosphorylation on Ser-81, Ser-162, Ser-190 and Ser-400 is increased in response to progesterone and can be phosphorylated in vitro by the CDK2-

A1 complex. Increased levels of phosphorylation on Ser-400 also in the presence of EGF, heregulin, IGF, PMA and FBS. Phosphorylation at this site by CDK2 is ligand-independent, and increases nuclear translocation and transcriptional activity. Phosphorylation at Ser-162 and Ser-294, but not at Ser-190, is impaired during the G(2)/M phase of the cell cycle. Phosphorylation on Ser-345 by ERK1/2 MAPK is required for interaction with SP1.

Sumoylation is hormone-dependent and represses transcriptional activity. Sumoylation on all three sites is enhanced by PIAS3. Desumoylated by SENP1. Sumoylation on Lys-388, the main site of sumoylation, is repressed by ubiquitination on the same site, and modulated by phosphorylation at Ser-294.

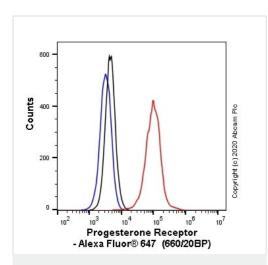
Ubiquitination is hormone-dependent and represses sumoylation on the same site. Promoted by MAPK-mediated phosphorylation on Ser-294.

Palmitoylated by ZDHHC7 and ZDHHC21. Palmitoylation is required for plasma membrane targeting and for rapid intracellular signaling via ERK and AKT kinases and cAMP generation.

Nucleus. Cytoplasm. Nucleoplasmic shuttling is both homone- and cell cycle-dependent. On hormone stimulation, retained in the cytoplasm in the G(1) and G(2)/M phases; Mitochondrion outer membrane and Nucleus. Cytoplasm. Mainly nuclear.

細胞内局在

画像



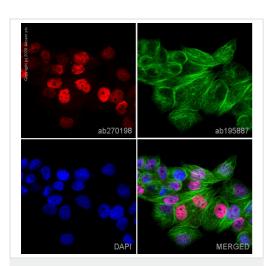
Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-Progesterone Receptor antibody [SP42] (ab270198)

Flow cytometry overlay histogram showing T47D cells stained with ab270198 (red line). The cells were fixed with 4 % formaldehyde (10 min) and then permeabilized with 0.1 % PBS-Triton X-100 for 15 min. The cells were incubated in 1x PBS containing 10 % normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab270198) (1x 10^6 in 100μ l at $0.04~\mu$ g/ml (1/12500)) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor[®] 647 (<u>ab199093</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 40 mW Red laser (640nm) and 660/20 bandpass filter.

This antibody gave a positive signal in T47D cells fixed with 80 % methanol (5 min) / permeabilized with 0.1 % PBS-Triton X-100 for 15 min used under the same conditions.

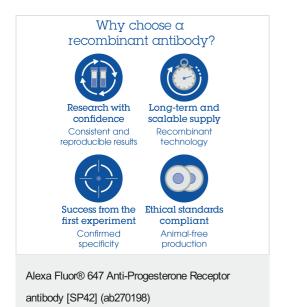


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Progesterone Receptor antibody [SP42] (ab270198)

Immunofluorescence staining of Progesterone Receptor in T47D cells using ab270198. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab270198 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in T47D cells fixed with 100% methanol (5 min).



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