# abcam

# Product datasheet

# Alexa Fluor® 555 Anti-STAT3 (phospho Y705) antibody [EP2147Y] ab202876

ייבער RabMAb

★★★★★ 1 Abreviews 1 References

画像数 2

#### 製品の概要

製品名 Alexa Fluor® 555 Anti-STAT3 (phospho Y705) antibody [EP2147Y]

Alexa Fluor® 555 Rabbit monoclonal [EP2147Y] to STAT3 (phospho Y705) 製品の詳細

由来種 Rabbit

Alexa Fluor® 555. Ex: 555nm, Em: 565nm 標識

アプリケーション 適用あり: ICC/IF 種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab179551)

ポジティブ・コントロール ICC/IF: HeLa cells treated with 50ng/ml IFNa for 5 minutes

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

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outlicensing@thermofisher.com.

## 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.

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

精製度 Protein A purified

**ポリ/モノ** モノクローナル **クローン名** EP2147Y

アイソタイプ IgG

# アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab202876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	<b>★</b> ★ ★ ★ <b>(1)</b>	1/100. This product gave a positive signal in HeLa cells treated with 50ng/ml IFN? for 5 minutes and fixed with 4% formaldehyde (10 min).

# ターゲット情報

機能 Signal transducer and transcription activator that mediates cellular responses to interleukins.

KITLG/SCF, LEP and other growth factors. Once activated, recruits coactivators, such as NCOA1 or MED1, to the promoter region of the target gene (PubMed:17344214). May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4. Binds to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes. Activated by IL31 through IL31RA. Involved in cell cycle regulation by inducing the expression of key genes for the progression from G1 to S phase, such as CCND1 (PubMed:17344214). Mediates the effects of LEP on melanocortin production, body energy homeostasis and lactation (By similarity).

May play an apoptotic role by transctivating BIRC5 expression under LEP activation (PubMed:18242580). Cytoplasmic STAT3 represses macroautophagy by inhibiting

EIF2AK2/PKR activity.

組織特異性 Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

関連疾患 Hyperimmunoglobulin E recurrent infection syndrome, autosomal dominant

Autoimmune disease, multisystem, infantile-onset

**配列類似性** Belongs to the transcription factor STAT family.

Contains 1 SH2 domain.

翻訳後修飾 Tyrosine phosphorylated upon stimulation with EGF. Tyrosine phosphorylated in response to

constitutively activated FGFR1, FGFR2, FGFR3 and FGFR4 (By similarity). Activated through tyrosine phosphorylation by BMX. Tyrosine phosphorylated in response to IL6, IL11, LIF, CNTF,

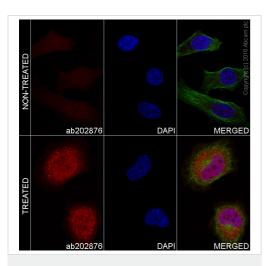
KITLG/SCF, CSF1, EGF, PDGF, IFN-alpha, LEP and OSM. Activated KIT promotes phosphorylation on tyrosine residues and subsequent translocation to the nucleus.

Phosphorylated on serine upon DNA damage, probably by ATM or ATR. Serine phosphorylation is important for the formation of stable DNA-binding STAT3 homodimers and maximal transcriptional activity. ARL2BP may participate in keeping the phosphorylated state of STAT3 within the nucleus. Upon LPS challenge, phosphorylated within the nucleus by IRAK1. Upon erythropoietin treatment, phosphorylated on Ser-727 by RPS6KA5. Phosphorylation at Tyr-705 by PTK6 or FER leads to an increase of its transcriptional activity. Dephosphorylation on tyrosine residues by PTPN2 negatively regulates IL6/interleukin-6 signaling.

### 細胞内局在

Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm. Translocated into the nucleus upon tyrosine phosphorylation and dimerization, in response to signaling by activated FGFR1, FGFR2, FGFR3 or FGFR4. Constitutive nuclear presence is independent of tyrosine phosphorylation. Predominantly present in the cytoplasm without stimuli. Upon leukemia inhibitory factor (LIF) stimulation, accumulates in the nucleus. The complex composed of BART and ARL2 plays an important role in the nuclear translocation and retention of STAT3. Identified in a complex with LYN and PAG1.

### 画像



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 555 Anti-STAT3 (phospho Y705) antibody [EP2147Y] (ab202876) ab202876 staining STAT3 (phospho Y705) in HeLa cells. The cells were incubated with 50ng/ml IFN $\alpha$  for 5 minutes (Treated) or solvent-only for control purposes (Non-treated). Cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with <u>ab202877</u> at 1/100 dilution (**pseudocolored in red**) and <u>ab195887</u> Mouse monoclonal [DM1A] to alpha Tubulin - Microtubule Marker (Alexa Fluor<sup>®</sup> 488) at 2 $\mu$ g/ml (shown in green) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Alexa Fluor® 555 Anti-STAT3 (phospho Y705) antibody [EP2147Y] (ab202876)

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