abcam

Product datasheet

STAT3 (phospho Y705) peptide ab179551

1 References 1 图像

描述

产品名称 STAT3 (phospho Y705)多肽

No

Accession P40763

H-G

性质 Synthetic

修饰 phospho Y705

技术指标

应用

无动物成分

Our Abpromise guarantee covers the use of ab179551 in the following tested applications.

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

形式 Lyophilized

补充说明 - First try to dissolve a small amount of peptide in either water or buffer. The more charged

residues on a peptide, the more soluble it is in aqueous solutions.

- If the peptide doesn't dissolve try an organic solvent e.g. DMSO, then dilute using water or

Blocking - Blocking peptide for Anti-STAT3 (phospho Y705) antibody [EP2147Y] (ab76315)

buffer.

- Consider that any solvent used must be compatible with your assay. If a peptide does not

dissolve and you need to recover it, lyophilise to remove the solvent.

- Gentle warming and sonication can effectively aid peptide solubilisation. If the solution is

cloudy or has gelled the peptide may be in suspension rather than solubilised.

- Peptides containing cysteine are easily oxidised, so should be prepared in solution just prior

to use.

制备和贮存

稳定性和存储 Shipped at 4°C. Store at -20°C.

Information available upon request.

常规信息

功能 Signal transducer and transcription activator that mediates cellular responses to interleukins,

1

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.

组织特异性

Heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

疾病相关

 $\label{prop:continuous} \mbox{Hyperimmunoglobulin E recurrent infection syndrome, autosomal dominant}$

Autoimmune disease, multisystem, infantile-onset

序列相似性

Belongs to the transcription factor STAT family.

Contains 1 SH2 domain.

翻译后修饰

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

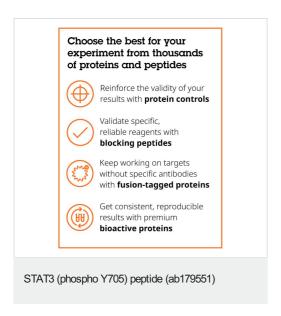
erythropoietin treatment, phosphorylated on Ser-727 by RPS6KA5. Phosphorylation at Tyr-705 by

PTK6 or FER leads to an increase of its transcriptional activity. Dephosphorylation on tyrosine residues by PTPN2 negatively regulates IL6/interleukin-6 signaling.

细胞定位

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.

图片



To learn more about our protein and peptide range click here.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors