abcam

ab278642

Anti-c-Fos (phospho S32) antibody [cFosS32-BA9]

Lab Essentials | Recombinant | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human FOS pS32. The exact immunogen used to generate this antibody is proprietary information. Database link P01100
Clone number	cFosS32-BA9
Purification technique	Affinity purification Protein A/G
Light chain type	kappa
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	0.001-1 µg/mL

Notes	-

Species	Rat
Dilution info	0.001-1 µg/mL
Notes	-

Species	Human
Dilution info	0.001-1 µg/mL
Notes	-

Target data

See full target information FOS pS32

Function	Nuclear phosphoprotein which forms a tight but non-covalently linked complex with the JUN/AP-1 transcription factor. In the heterodimer, FOS and JUN/AP-1 basic regions each seems to interact with symmetrical DNA half sites. On TGF-beta activation, forms a multimeric SMAD3/SMAD4/JUN/FOS complex at the AP1/SMAD-binding site to regulate TGF-beta-mediated signaling. Has a critical function in regulating the development of cells destined to form and maintain the skeleton. It is thought to have an important role in signal transduction, cell proliferation and differentiation. In growing cells, activates phospholipid synthesis, possibly by activating CDS1 and PI4K2A. This activity requires Tyr-dephosphorylation and association with the endoplasmic reticulum.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The c-Fos protein also known as c-Fos is a component of the Fos family of transcription factors which includes FosB Fra-1 and Fra-2. These proteins play a role in regulating gene expression. c-Fos has a molecular weight of about 55 kDa. You usually find c-Fos expressed in various tissues including the brain providing a marker for neuronal activity and is often induced in response to stimuli like stress growth factors and mitogens. In research settings c-Fos staining and c-Fos immunohistochemistry are techniques commonly used to study activation patterns in cells and tissues.
Biological function summary	C-Fos acts as part of the Activator Protein-1 (AP-1) complex a group of DNA-binding proteins that regulate gene transcription. This complex forms when c-Fos and Jun proteins dimerize. The AP-1 complex controls several cellular processes such as proliferation differentiation and apoptosis. Due to its participation in these vital processes c-Fos influences cellular responses to external stimuli and can affect how cells behave under stress.
Pathways	C-Fos significantly contributes to the MAPK/ERK pathway which plays a role in cell growth and differentiation. It partners with Jun proteins to form functional transcription factors within the MAPK signaling cascade. Additionally c-Fos is involved in the JNK signaling pathway linking it to stress responses and apoptosis. These pathways highlight the partnerships between c-Fos and other proteins like ERK and JNK indicating their intertwined roles in cellular signaling networks.
Associated diseases and disorders	Researchers associate c-Fos with cancer and neurodegenerative diseases. In cancer c-Fos expression correlates with changes in AP-1 activity which can lead to altered cell growth and proliferation potentially contributing to tumor formation. Its involvement in neurodegenerative diseases reveals its role in neuron apoptosis and cellular stress responses. In these scenarios proteins like Bcl-2 also play a part with CDK1 sharing connections in processes that affect cell cycle and apoptosis illustrating c-Fos's broad significance in both normal and pathological conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

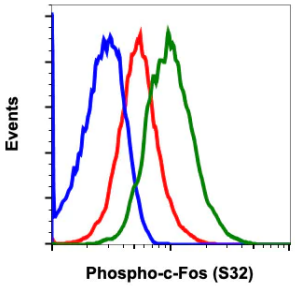
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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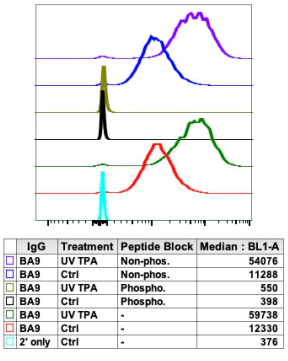
4 product images



Flow Cytometry - Anti-c-Fos (phospho S32) antibody [cFosS32-BA9] (ab278642)

C-Fos (phospho S32) Flow Cytometry staining using rabbit Anti-c-Fos (phospho S32) antibody

Flow cytometric analysis of HeLa cells, secondary antibody only negative control (blue) or untreated (red) or treated with UV+TPA (green) using ab278642 at 0.001 µg/mL.

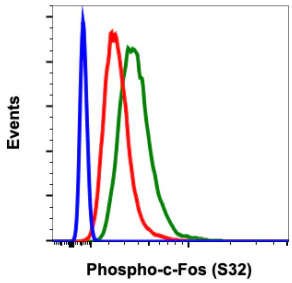


IgG	Treatment	Peptide Block	Median : BL1-A
BA9	UV TPA	Non-phos.	54076
BA9	Ctrl	Non-phos.	11288
BA9	UV TPA	Phospho.	550
BA9	Ctrl	Phospho.	398
BA9	UV TPA	-	59738
BA9	Ctrl	-	12330
2° only	Ctrl	-	376

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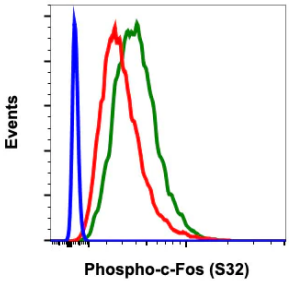
Peptide blocking flow cytometric analysis of HeLa cells secondary antibody only negative control (light blue) or untreated (red) or treated with UV + TPA (green) or untreated and blocked with phospho-peptide (black) or treated and blocked with phospho peptide (gold) or untreated and blocked with non-phospho peptide (dark blue) or treated and blocked with non-phospho peptide (purple) using ab278642 at 0.01µg/mL.



Flow Cytometry - Anti-c-Fos (phospho S32) antibody [cFosS32-BA9] (ab278642)

C-Fos (phospho S32) Flow Cytometry staining using rabbit Anti-c-Fos (phospho S32) antibody

Flow cytometric analysis of L929 cells, secondary antibody only negative control (blue) or untreated (red) or treated with UV (green) using ab278642 at 0.001 µg/mL.



Flow Cytometry - Anti-c-Fos (phospho S32) antibody [cFosS32-BA9] (ab278642)

C-Fos (phospho S32) Flow Cytometry staining using rabbit Anti-c-Fos (phospho S32) antibody

Flow cytometric analysis of C6 cells, secondary antibody only negative control (blue) or untreated (red) or treated with UV+TPA (green) using ab278642 at 0.001 µg/mL.

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