abcam

Product datasheet

Human c-Fos (phospho T232) peptide ab43652

1 Image

Description

Product name	Human c-Fos (phospho T232) peptide
Purity	> 70 % HPLC. 70 - 90% by HPLC
Animal free	No
Nature	Synthetic
Species	Human

Specifications

Our **Abpromise guarantee** covers the use of **ab43652** in the following tested applications.

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

Applications	Blocking - Blocking peptide for Anti-c-Fos (phospho T232) antibody (**ab43175**)
Form	Liquid
Additional notes	*- 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 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.*

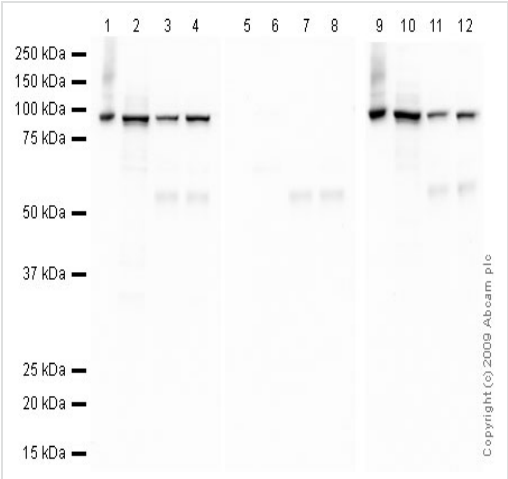
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

General Info

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.
Sequence similarities	Belongs to the bZIP family. Fos subfamily. Contains 1 bZIP domain.
Post-translational modifications	Phosphorylated in the C-terminal upon stimulation by nerve growth factor (NGF) and epidermal growth factor (EGF). Phosphorylated, in vitro, by MAPK and RSK1. Phosphorylation on both Ser-362 and Ser-374 by MAPK1/2 and RSK1/2 leads to protein stabilization with phosphorylation on Ser-374 being the major site for protein stabilization on NGF stimulation. Phosphorylation on Ser-362 and Ser-374 primes further phosphorylations on Thr-325 and Thr-331 through promoting docking of MAPK to the DEF domain. Phosphorylation on Thr-232, induced by HA-RAS, activates the transcriptional activity and antagonizes sumoylation. Phosphorylation on Ser-362 by RSK2 in osteoblasts contributes to osteoblast transformation. Constitutively sumoylated by SUMO1, SUMO2 and SUMO3. Desumoylated by SENP2. Sumoylation requires heterodimerization with JUN and is enhanced by mitogen stimulation. Sumoylation inhibits the AP-1 transcriptional activity and is, itself, inhibited by Ras-activated phosphorylation on Thr-232.
Cellular localization	Nucleus.

Images



Western blot - Human c-Fos (phospho T232) peptide (ab43652)

All lanes : Anti-c-Fos (phospho T232) antibody (**ab43175**) at 1 µg/ml

Lane 1 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate - EGF treated
Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate
Lane 3 : Hela Whole Cell Lysate - Bleomycin Treated (40U/ml)
Lane 4 : Hela Whole Cell Lysate - Hydroxyurea Treated (48hr, 2uM)
Lane 5 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate - EGF treated with Human c-Fos (phospho T232) peptide (ab43652) at 1 µg/ml
Lane 6 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate with Human c-Fos (phospho T232) peptide (ab43652) at 1 µg/ml
Lane 7 : Hela Whole Cell Lysate - Bleomycin Treated (40U/ml) with Human c-Fos (phospho T232) peptide (ab43652) at 1 µg/ml
Lane 8 : Hela Whole Cell Lysate - Hydroxyurea Treated (48hr, 2uM) with Human c-Fos (phospho T232) peptide (ab43652) at 1 µg/ml
Lane 9 : A431 (Human epithelial carcinoma cell line) Whole Cell

Lysate - EGF treated with Human c-Fos peptide (**ab60297**) at 1 µg/ml
Lane 10 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate with Human c-Fos peptide (**ab60297**) at 1 µg/ml
Lane 11 : Hela Whole Cell Lysate - Bleomycin Treated (40U/ml) with Human c-Fos peptide (**ab60297**) at 1 µg/ml
Lane 12 : Hela Whole Cell Lysate - Hydroxyurea Treated (48hr, 2uM) with Human c-Fos peptide (**ab60297**) at 1 µg/ml

Lysates/proteins at 10 µg per lane.

Secondary
Lanes 1 & 12 : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution
Lanes 2-11 : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

Observed band size: 95 kDa

ab43175 detects a 95 kDa band in western blot. This is consistent with results obtained by other commercially available antibodies to this target, as c-Fos has been reported to dimerise with the c-Jun protein hence migration at a higher molecular weight than predicted.

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