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Phospho-FOS(T232) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3314a

Product Information

Application	DB, E
Primary Accession	P01100
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB11180
Calculated MW	40695

Additional Information

Gene ID	2353
Other Names	Proto-oncogene c-Fos, Cellular oncogene fos, G0/G1 switch regulatory protein 7, FOS, G0S7
Target/Specificity	This FOS Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T232 of human FOS.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-FOS(T232) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FOS
Synonyms	G0S7
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.
Cellular Location	Nucleus. Endoplasmic reticulum. Cytoplasm, cytosol. Note=In quiescent cells, present in very small amounts in the cytosol. Following induction of cell growth, first localizes to the endoplasmic reticulum and only later to the nucleus. Localization at the endoplasmic reticulum requires dephosphorylation at Tyr-10 and Tyr- 30

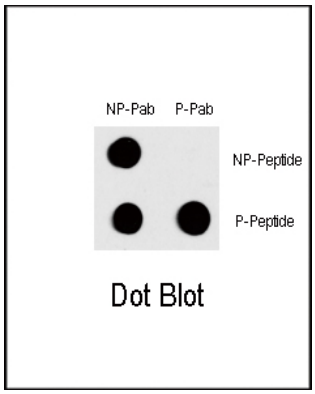
Background

The Fos gene family consists of 4 members: FOS, FOSB, FOSL1, and FOSL2. These genes encode leucine zipper proteins that can dimerize with proteins of the JUN family, thereby forming the transcription factor complex AP-1. As such, the FOS proteins have been implicated as regulators of cell proliferation, differentiation, and transformation. In some cases, expression of the FOS gene has also been associated with apoptotic cell death.

References

Gensch, E., et al., J. Biol. Chem. 279(37):39085-39093 (2004).
Myllykangas, S., et al., Genes Chromosomes Cancer 40(4):334-341 (2004).
Wu, M.Y., et al., World J. Gastroenterol. 10(4):476-480 (2004).
Monje, P., et al., Mol. Cell. Biol. 23(19):7030-7043 (2003).
Lavezzi, A.M., et al., Pathol. Int. 53(11):769-774 (2003).

Images



Dot blot analysis of Phospho-FOS-T232 polyclonal antibody (Cat# AP3314a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentration was 0.5ug per ml. P-Pab: phospho-antibody; P-Peptide: phospho-peptide; NP-Peptide: non-phospho-peptide.

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