

## CREB-2 (phospho Ser245) Polyclonal Antibody

YP0076 Catalog No:

Reactivity: Human; Rat; Mouse;

**Applications:** IHC;IF(paraffin section);ELISA

Q06507

Gene Name: ATF4

**Protein Name:** Cyclic AMP-dependent transcription factor ATF-4

**Human Gene Id:** 468

**Human Swiss Prot** 

P18848

No:

**Mouse Swiss Prot** 

No:

The antiserum was produced against synthesized peptide derived from human Immunogen:

ATF4 around the phosphorylation site of Ser245. AA range:212-261

Phospho-CREB-2 (S245) Polyclonal Antibody detects endogenous levels of **Specificity:** 

CREB-2 protein only when phosphorylated at S245.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Polyclonal, Rabbit, IgG Source:

IHC 1:100 -300. ELISA: 1:10000. Not yet tested in other applications. **Dilution:** 

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration:** 1 mg/ml

**Storage Stability:** -20°C/1 year

**Cell Pathway:** MAPK ERK Growth; MAPK G Protein; Long-term

potentiation; Neurotrophin; GnRH; Prostate cancer;

### **Background:**

activating transcription factor 4(ATF4) Homo sapiens This gene encodes a transcription factor that was originally identified as a widely expressed mammalian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTLV-1. The encoded protein was also isolated and characterized as the cAMP-response element binding protein 2 (CREB-2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP-1 family of transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper region that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino acids that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are located on the X chromosome at q28 in a region containing a large inverted duplication. [provid

#### **Function:**

function:Transcriptional activator. Binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. It binds to a Tax-responsive enhancer element in the long terminal repeat of HTLV-I.,similarity:Belongs to the bZIP family.,similarity:Contains 1 bZIP domain.,subcellular location:Colocalizes with GABBR1 in hippocampal neuron dendritic membranes.,subunit:Interacts with the C-terminal region of GABBR1 via the leucine zipper of its C-terminal bZIP domain. Interacts with the C-terminal region of GABBR2 (By similarity). Binds DNA as a homo-or heterodimer. Interacts with the N-terminal region of CEP290.,

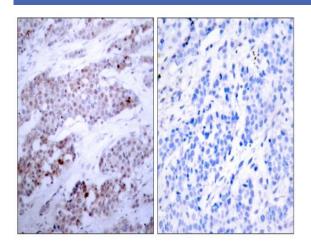
# Subcellular Location:

Nucleus . Nucleus speckle . Cytoplasm . Cell membrane . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Colocalizes with GABBR1 in hippocampal neuron dendritic membranes (By similarity). Colocalizes with NEK6 at the centrosome (PubMed:20873783). Recruited to nuclear speckles following interaction with EP300/p300 (PubMed:16219772).

## **Expression:**

Bladder, Colon, Fibroblast, Leukemic T-cell, Lung, Ovary, Placenta,

# **Products Images**



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using ATF4 (Phospho-Ser245) Antibody. The picture on the right is blocked with the phospho peptide.