10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATF2 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10113

Product Information

Application	WB, IHC
Primary Accession	P15336
Other Accession	P15336-2, NP_001871, NM_001880
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54537

Additional Information

Gene ID	1386
Alias Symbol	HB16, CREB2, TREB7, CRE-BP1
Other Names	Cyclic AMP-dependent transcription factor ATF-2, cAMP-dependent transcription factor ATF-2, Activating transcription factor 2, Cyclic AMP-responsive element-binding protein 2, CREB-2, cAMP-responsive element-binding protein 2, HB16, Histone acetyltransferase ATF2, cAMP response element-binding protein CRE-BP1, ATF2, CREB2, CREBP1
Target/Specificity	ATF2 encodes a transcription factor that is a member of the leucine zipper family of DNA binding proteins. This protein binds to the cAMP-responsive element (CRE), an octameric palindrome. The protein forms a homodimer or heterodimer with c-Jun and stimulates CRE-dependent transcription. The protein is also a histone acetyltransferase (HAT) that specifically acetylates histones H2B and H4 in vitro, thus it may represent a class of sequence-specific factors that activate transcription by direct effects on chromatin components.
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 100 ul of distilled water. Final anti-ATF2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.
Precautions	ATF2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

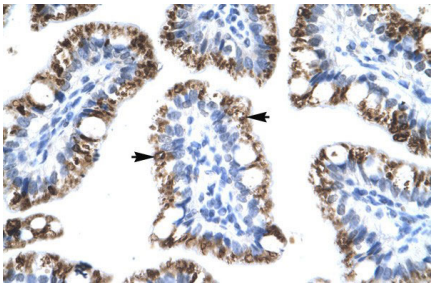
Name	ATF2
Synonyms	CREB2, CREBP1
Function	Transcriptional activator which regulates the transcription of various genes, including those involved in anti-apoptosis, cell growth, and DNA damage response (PubMed:11932306, PubMed:15105425, PubMed:15916964, PubMed:22304920, PubMed:2529117). Dependent on its binding partner, binds to CRE (cAMP response element) consensus sequences (5'-TGACGTCA-3') or to AP-1 (activator protein 1) consensus sequences (5'-TGACTCA-3') (PubMed:11932306, PubMed:2529117). In the nucleus, contributes to global transcription and the DNA damage response, in addition to specific transcriptional activities that are related to cell development, proliferation and death (PubMed:22304920). In liver, acts as a regulator of glucose metabolism downstream of OR5V1 signaling, which promotes ATF2 activation, leading to expression of carnitine palmitoyltransferase CPT1A (By similarity). In the cytoplasm, interacts with and perturbs HK1- and VDAC1-containing complexes at the mitochondrial outer membrane, thereby impairing mitochondrial membrane potential, inducing mitochondrial leakage and promoting cell death (PubMed:22304920). The phosphorylated form (mediated by ATM) plays a role in the DNA damage response and is involved in the ionizing radiation (IR)-induced S phase checkpoint control and in the recruitment of the MRN complex into the IR-induced foci (IRIF) (PubMed:15916964). In concert with CUL3 and RBX1, promotes the degradation of KAT5 thereby attenuating its ability to acetylate and activate ATM (PubMed:18397884). Can elicit oncogenic or tumor suppressor activities depending on the tissue or cell type (PubMed:18677098).
Cellular Location	Nucleus. Cytoplasm Mitochondrion outer membrane Note=Shuttles between the cytoplasm and the nucleus and heterodimerization with JUN is essential for the nuclear localization (PubMed:22275354). Localization to the cytoplasm is observed under conditions of cellular stress and in disease states (PubMed:22304920) Localizes at the mitochondrial outer membrane in response to genotoxic stress (PubMed:22304920). Phosphorylation at Thr-52 is required for its nuclear localization and negatively regulates its mitochondrial localization (PubMed:22304920). Co-localizes with the MRN complex in the IR-induced foci (IRIF) (PubMed:15916964)
Tissue Location	Ubiquitously expressed, with more abundant expression in the brain.

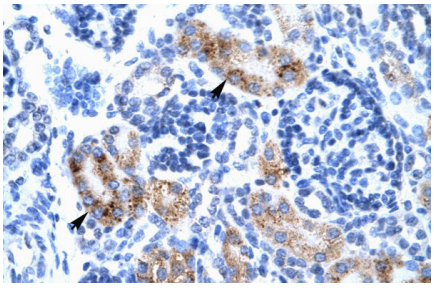
Background

This is a rabbit polyclonal antibody against ATF2. It was validated on Western Blot and immunohistochemistry by Abgent. At Abgent we manufacture rabbit polyclonal antibodies on a large scale (200-1000 products/month) of high throughput manner. Our antibodies are peptide based and protein family oriented. We usually provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).

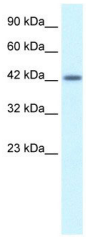
Images

ATF2 antibody - C-terminal region (AI10113) in Human Intestine cells using Immunohistochemistry
Human Intestine





ATF2 antibody - C-terminal region (AI10113) in Human kidney cells using Immunohistochemistry
Human kidney



ATF2 antibody - C-terminal region (AI10113) in Human Jurkat cells using Western Blot
WB Suggested Anti-ATF2 Antibody Titration: 1.25 µg/ml
Positive Control: Jurkat cell lysate

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