

Basic Information

Product Name	Anti-ATF4 Antibody
Gene Name	ATF4
Source	Rabbit
Isotype	IgG
Species Reactivity	human
Tested Application	WB, IHC
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence of human ATF4 (KELEKKNEALKERADSLAKEIQYLKDLIEEVRKARGKKRVP).
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	50KD
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

ATF4, Activating Transcription Factor 4, is also known as CREB2. ATF4 belongs to the large ATF/CREB family of transcription factors which bind DNA via their basic region and dimerize via their leucine zipper domain to form a variety of homo- and heterodimers to regulate gene transcription. It is identified that members of this family share significant sequence similarity within a leucine zipper DNA-binding motif and an adjacent basic region. The ATF4 gene is mapped to chromosome 22. Unlike CREB, which activates transcription from CRE-containing promoters, CREB2 functions as a specific repressor of CRE-dependent transcription. The transcriptional repressor activity resides within the C-terminal leucine zipper and basic domain region of the CREB2 protein.

Selected Validation Data

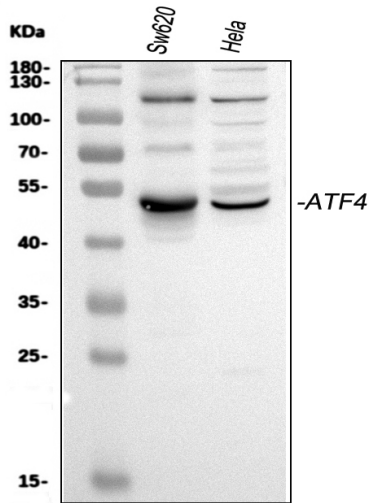


Figure 1. Western blot analysis of anti- ATF4 antibody (A00371-1). The sample well of each lane was loaded with 30ug of sample under reducing conditions.
Lane 1: human SW620 whole cell lysates,
Lane 2: human HeLa whole cell lysates.
Use rabbit anti- ATF4 1:1000, probed with a goat anti-rabbit IgG- HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for ATF4 at approximately 50KD. The expected band size for ATF4 is at 39KD.

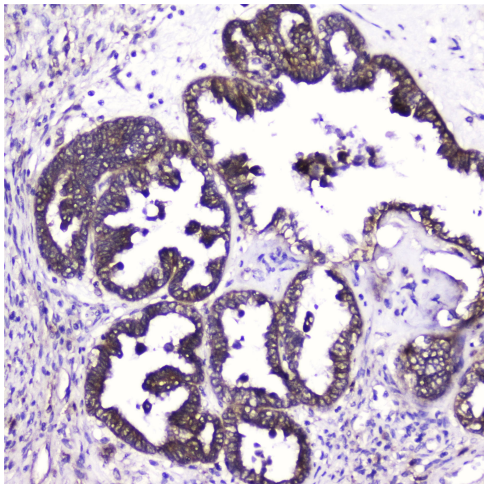


Figure 2. IHC analysis of ATF4 using anti-ATF4 antibody (A00371-1). ATF4 was detected in paraffin-embedded section of human ovary cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.