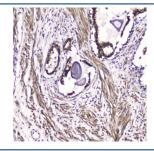


# ATF4 Antibody (RQ4441)

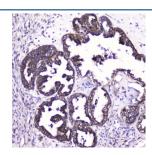
Catalog No.	Formulation	Size
RQ4441	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

# **Bulk quote request**

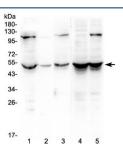
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P18848
Localization	Nuclear, cytoplasmic, cell membrane
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This ATF4 antibody is available for research use only.



IHC testing of FFPE human prostate cancer with ATF4 antibody at 2ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE human ovarian cancer with ATF4 antibody at 2ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of human 1) HeLa, 2) placenta, 3) HepG2, 4) MDA-MB-231 and 5) SW620 lysate with ATF4 antibody at 0.5ug/ml. Predicted molecular weight ~39 kDa, observed here at ~49 kDa.

## **Description**

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.

#### **Application Notes**

Optimal dilution of the ATF4 antibody should be determined by the researcher.

## **Immunogen**

Amino acids KELEKKNEALKERADSLAKEIQYLKDLIEEVRKARGKKRVP were used as the immunogen for the ATF4 antibody.

#### **Storage**

After reconstitution, the ATF4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.