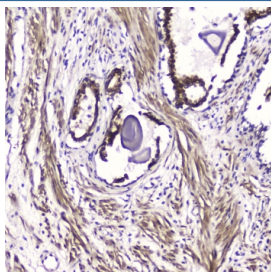


## ATF4 Antibody (RQ4441)

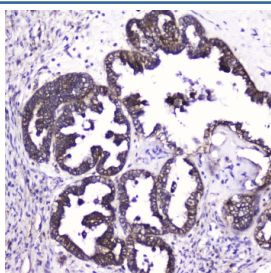
Catalog No.	Formulation	Size
RQ4441	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

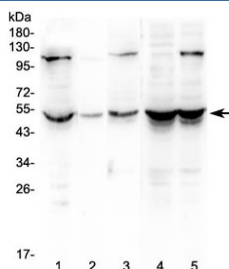
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
<b>UniProt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