

# Product datasheet

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# ARG42600 anti-CREB3L2 / BBF2H7 antibody

Package: 50 μl Store at: -20°C

### Summary

Host

Product Description Rabbit Polyclonal antibody recognizes CREB3L2 / BBF2H7

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Cow, Dog, Gpig, Hrs, Rb

Rabbit

Tested Application IHC-P, WB

Clonality Polyclonal

Cionality

Isotype IgG

Target Name CREB3L2 / BBF2H7

Species Human

Immunogen Synthetic peptide around the N-terminal region of Human CREB3L2 / BBF2H7. (within the following

region: HSYSLCEEPRAQSPFTHITSDSFNDDEVESEKWYLSTDF)

Conjugation Un-conjugated

Alternate Names Cyclic AMP-responsive element-binding protein 3-like protein 2; BBF2 human homolog on chromosome

7; BBF2H7; cAMP-responsive element-binding protein 3-like protein 2

## **Application Instructions**

Predict Reactivity Note Predicted Homology Based on Immunogen Sequence: Cow: 93%; Dog: 85%; Guinea pig: 87%; Horse:

87%; Mouse: 86%; Rabbit: 87%; Rat: 87%

Application table Application Dilution

IHC-P Assay-dependent

WB 1 - 5 μg/ml

Application Note \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations

should be determined by the scientist.

Positive Control Jurkat, Human fetal muscle, lung, heart and brain.

Observed Size ~ 52 kDa

## **Properties**

Form Liquid

Purification Purification with Protein A.

Buffer PBS, 0.09% (w/v) Sodium azide and 2% Sucrose.

Preservative 0.09% (w/v) Sodium azide

Stabilizer 2% Sucrose

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Concentration Batch dependent: 0.5 - 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol CREB3L2

Gene Full Name cAMP responsive element binding protein 3-like 2

Background This gene encodes a member of the oasis bZIP transcription factor family. Members of this family can

dimerize but form homodimers only. The encoded protein is a transcriptional activator. Translocations between this gene on chromosome 7 and the gene fused in sarcoma on chromosome 16 can be found in some tumors. Multiple transcript variants encoding different isoforms have been found for this gene.

[provided by RefSeq, Dec 2011]

Function Transcription factor involved in unfolded protein response (UPR). In the absence of endoplasmic

reticulum (ER) stress, inserted into ER membranes, with N-terminal DNA-binding and transcription activation domains oriented toward the cytosolic face of the membrane. In response to ER stress, transported to the Golgi, where it is cleaved in a site-specific manner by resident proteases

S1P/MBTPS1 and S2P/MBTPS2. The released N-terminal cytosolic domain is translocated to the nucleus to effect transcription of specific target genes. Plays a critical role in chondrogenesis by activating the transcription of SEC23A, which promotes the transport and secretion of cartilage matrix proteins, and possibly that of ER biogenesis-related genes (By similarity). In a neuroblastoma cell line, protects cells from ER stress-induced death (PubMed:17178827). In vitro activates transcription of target genes via

direct binding to the CRE site (PubMed:17178827). [UniProt]

Calculated Mw 57 kDa

PTM Upon ER stress, translocated to the Golgi apparatus, where it is processed by regulated intramembrane proteolysis (RIP) to release the cytosol-facing N-terminal transcription factor domain. The cleavage is

performed sequentially by site-1 and site-2 proteases (S1P/MBTPS1 and S2P/MBTPS2).

N-glycosylated.

Ubiquitinated by HRD1/SYVN1; undergoes 'Lys-48'-linked ubiquitination, followed by rapid proteasomal degradation under normal conditions. Upon ER stress, SYVN1 E3 ubiquitin-protein ligase dissociates

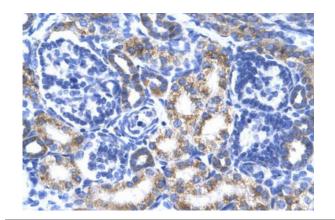
from its substrate, ubiquitination does not occur and CREB3L2 is stabilized. [UniProt]

Cellular Localization Endoplasmic reticulum membrane; Single-pass type II membrane protein. Note=ER membrane resident

protein. Upon ER stress, translocated to the Golgi apparatus where it is cleaved. The cytosolic N-terminal fragment (processed cyclic AMP-responsive element-binding protein 3-like protein 1) is transported into the nucleus. Processed cyclic AMP-responsive element-binding protein 3-like protein

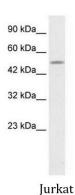
2/4

2: Nucleus. Note=Upon ER stress, translocated into the nucleus. [UniProt]



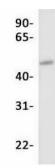
#### ARG42600 anti-CREB3L2 / BBF2H7 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human kidney tissue stained with ARG42600 anti-CREB3L2 / BBF2H7 antibody.



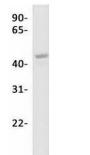
#### ARG42600 anti-CREB3L2 / BBF2H7 antibody WB image

Western blot: Jurkat cell lysate stained with ARG42600 anti-CREB3L2 / BBF2H7 antibody at 1.25  $\mu$ g/ml dilution.



## ARG42600 anti-CREB3L2 / BBF2H7 antibody WB image

Western blot: Human fetal muscle lysate stained with ARG42600 anti-CREB3L2 / BBF2H7 antibody at 1  $\mu g/ml$  dilution.



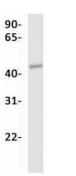
Human fetal lung

Human fetal muscle

## ${\sf ARG42600\ anti-CREB3L2\ /\ BBF2H7\ antibody\ WB\ image}$

Western blot: Human fetal lung lysate stained with ARG42600 anti-CREB3L2 / BBF2H7 antibody at 1  $\mu$ g/ml dilution.

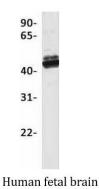
3/4



## ARG42600 anti-CREB3L2 / BBF2H7 antibody WB image

Western blot: Human fetal heart lysate stained with ARG42600 anti-CREB3L2 / BBF2H7 antibody at 1  $\mu$ g/ml dilution.

# Human fetal heart



## ARG42600 anti-CREB3L2 / BBF2H7 antibody WB image

Western blot: Human fetal brain lysate stained with ARG42600 anti-CREB3L2 / BBF2H7 antibody at 1  $\mu g/ml$  dilution.