

## ProQinase™ ATF2

activating transcription factor 2

Recombinant Protein Kinase Substrate

HGNC Symbol: ATF2

Synonyms: CRE-BP1, CREB2, HB16, TREB7

Product No.: 0594-0000-2

Lot: 013

**Description:** Human ATF2, N-terminal fragment, amino acids M<sub>19</sub>-D<sub>110</sub> (as in [NCBI/Protein](#) entry NP\_001871.2), N-terminal GST-HIS<sub>6</sub> fusion protein with a 3C cleavage site, expressed in E.coli

**Theoretical MW<sub>Fusion Protein</sub>:** 38,620 Da

**Expression host:** E.coli

**Purification:** GST-Affinity Chromatography

**ATPase activity:** In an ADP-Glo™ assay (Promega) with 10 μM ATP or 30 μM ATP, the ATP → ADP conversion within 30 min is < 1% at a concentration of 100 μg/ml substrate.

Detailed ATPase assay conditions on request

**Storage buffer:** 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 15 mM reduced glutathione, 10 % glycerol

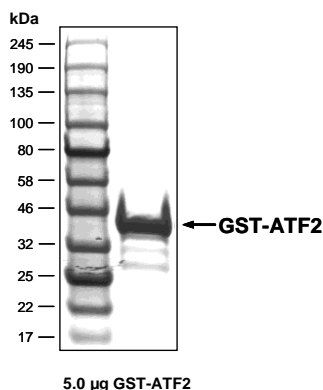
**Storage temperature:** -80°C

For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10μl are not advisable. Avoid repeated freeze-thaw cycles!

**Protein concentration:** 0.827 μg/μl

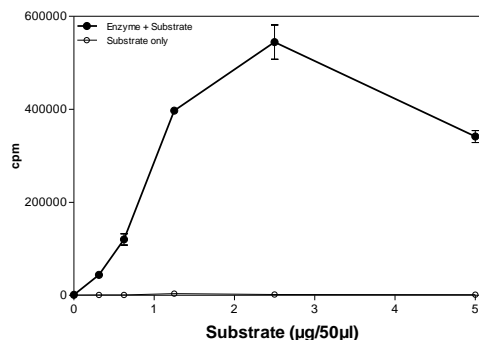
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

**ATF2 Lot 013: Coomassie stain**



### Phosphorylation of ATF2 Lot013 by p38-beta

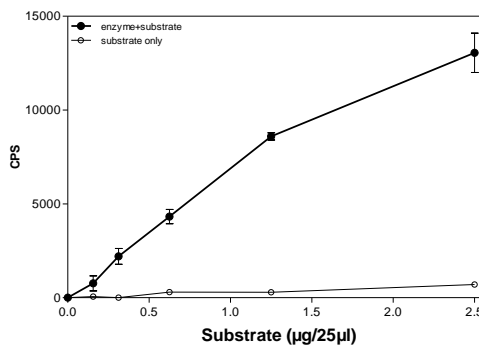
#### Radiometric filter binding assay



**Assay conditions:**

70 mM HEPES-NaOH, pH 7.5  
 3 mM MgCl<sub>2</sub>  
 3 mM MnCl<sub>2</sub>  
 3 μM Na-orthovanadate  
 1.2 mM DTT  
 50 μg/ml PEG<sub>20,000</sub>  
 ATP: 1 μM  
 Substrate: variable concentration  
 Kinase: 1 μg/ml  
 MSFC membrane (Millipore)

#### ADP-Glo™ assay (Promega)



**Assay conditions:**

70 mM HEPES-NaOH, pH 7.5  
 3 mM MgCl<sub>2</sub>  
 3 mM MnCl<sub>2</sub>  
 3 μM Na-orthovanadate  
 1.2 mM DTT  
 50 μg/ml PEG<sub>20,000</sub>  
 ATP: variable concentration  
 1 % (v/v) DMSO  
 Substrate: 100 μg/ml  
 Kinase: 1 μg/ml

This product was manufactured at Reaction Biology in Freiburg, Germany, and is for in vitro research use only, not for use in humans or animals.  
 © European Union, 2020. Material may not be reproduced or distributed without written permission from Reaction Biology Europe GmbH

## ProQinase™ ATF2

Product No.: 0594-0000-2

ATF2 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQG WQATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVL FQG	240
241	PLAMSDDKPF	LCTAPGCGQR	FTNEDHLAVH	KKHEMTLKF	GPARNSVIV	ADQTPTPTRE	300
301	LKNCEEVGLF	NELASPFENE	FKKASEDDIK	KMPLD			360

1-218: GST Red: HIS6-tag Green: 3C cleavage site blue: ATF2 fragment