

3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

ATF1, GST-tagged, human recombinant, expressed in Sf9 insect cells

Catalog Number **SRP5163** Storage Temperature –70 °C

Synonyms: TREB36, EWS-ATF1, FUS/ATF-1

Product Description

ATF1 is a class of transcription factor that stimulates gene expression of several cell growth-related genes through protein kinase A-related cAMP response elements. ATF1 can physically associate with BRCA1 *in vitro*, in yeast, and in human cells, and BRCA1 is implicated in the transcriptional activation of ATF1 target genes, some of which are involved in the transcriptional response to DNA damage. Mitogenand stress-activated protein kinase 1 (MSK1) and MSK2 play a role in the stress-induced phosphorylation of ATF1 in primary embryonic fibroblasts. However, mitogen-induced phosphorylation of ATF1 is greatly reduced.

Recombinant full-length human ATF1 was expressed by baculovirus in *Sf*9 insect cells using an N-terminal GST tag. The gene accession number is NM_005171. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~63 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

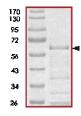
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70 °C is recommended. After opening, aliquot into smaller quantities and store at -70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.SDS-PAGE Gel of Typical Lot 70–95% (densitometry)



References

- 1. Houvras, Y. et al., BRCA1 physically and functionally interacts with ATF1. J. Biol. Chem., **275(46)**, 36230-7 (2000).
- 2. Wiggin, G.R. et al., MSK1 and MSK2 are required for the mitogen- and stress-induced phosphorylation of CREB and ATF1 in fibroblasts. Mol. Cell Biol., 22(8), 2871-81 (2002).

DKF,MAM 10/11-1