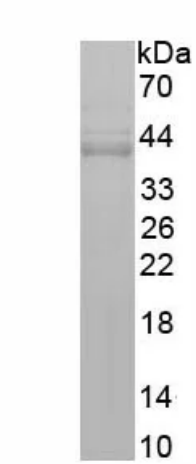
# Active Activating Transcription Factor 3 (ATF3)

*Catalog#:PEM12837*

## 概述（Summary）

| | |
|---|---|
| **别称（Alternative Names）** | Cyclic AMP-dependent Transcription Factor ATF3 |
| **纯度（Purity）** | Greater than 90% as determined by reducing SDS-PAGE. |
| **内毒素（Endotoxin level）** | Please contact with the lab for this information |
| **蛋白构建（Construction）** | 【Met1-Ser181】 |
| **Accession #** | Q60765 |
| **表达宿主（Host）** | E.coli |
| **种属（Species）** | Mus musculus (Mouse) |
| **预测分子量（Predicted MW）** | 50.7 kDa |
| **制剂（Form）** | Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. |
| **运输方式（Shipping）** | The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below. |
| **稳定性&储存（Stability &Storage）** | 12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles. |
| **复溶（Reconstitution）** | Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex. |
| **背景介绍（References）** | This protein binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Represses transcription from promoters with ATF sites. It may repress transcription by stabilizing the binding of inhibitory cofactors at the promoter. |

## 电泳图（SDS-PAGE image）




Greater than 90% as determined by reducing SDS-PAGE.

## 活性图（Bioactivity image）

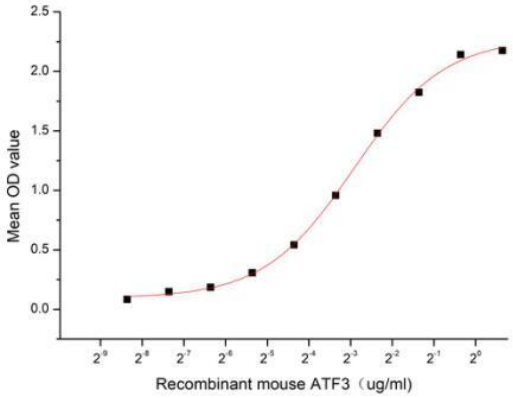



**Figure 1. The binding activity of recombinant mouse ATF3 and recombinant human FOS**

Activating transcription factor 3 (ATF3) is a stress-induced transcription factor that plays vital roles in modulating metabolism, immunity and oncogenesis. ATF3 acts as a hub of the cellular adaptive-response network. Multiple extracellular signals, such as endoplasmic reticulum (ER) stress, cytokines, chemokines, and LPS, are connected to ATF3 induction. Proto-oncogene c-Fos can bind to ATF3 to regulate signal transduction, cell proliferation and differentiation. Thus a functional ELISA assay was conducted to detect the interaction of recombinant mouse ATF3 and recombinant human FOS. Briefly, ATF3 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to FOS-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-ATF3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant mouse ATF3 and recombinant human FOS was shown in Figure 1, the EC50 for this effect is 0.13 ug/mL.

## 注意事项（Note）

For Research Use Only , Not for Diagnostic Use.