

Recombinant TAF1 (1522-1656) protein

Catalog No: 31439, 31839

Lot No: 11818005

Expressed In: *E. coli*

Quantity: 100, 1000 µg

Concentration: 1.5 µg/µl

Source: Human

Buffer Contents: Recombinant TAF1 (1522-1656) protein is supplied in 25 mM Tris pH 8.0, 300 mM NaCl, 10% glycerol.

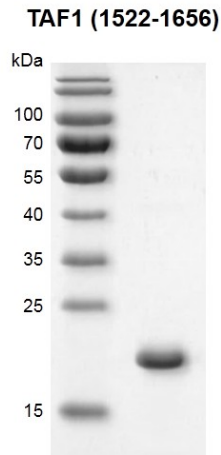
Background: TAF1 RNA polymerase II, TATA box binding protein (TBP)-associated factor (TAF1) is the largest component and core scaffold of the TFIID basal transcription factor complex. TAF1 contains novel N- and C-terminal Ser/Thr kinase domains which can autophosphorylate or transphosphorylate other transcription factors. TAF1 also contains bromodomains for interaction with other proteins. The bromodomain functions as a 'reader' of epigenetic histone marks and regulates chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. TAF1 has been shown to phosphorylate threonine 55 of p53 which leads to MDM2-mediated degradation of p53. TAF1 also phosphorylates GTF2A1 and GTF2F1 on serine residues. In addition, TAF1 possesses DNA-binding activity and is essential for progression of the G1 phase of the cell cycle.

Protein Details: The protein corresponding to amino acids 1522-1656 that contains the bromodomain sequence of TAF1 (accession number NP_004597.2) was expressed in *E. coli* and contains an N-terminal His-Tag and C-terminal FLAG-Tag with a molecular weight of 19.3 kDa. It shows binding specificity for acetylated H3K14.

Application Notes: Recombinant TAF1 (1522-1656) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

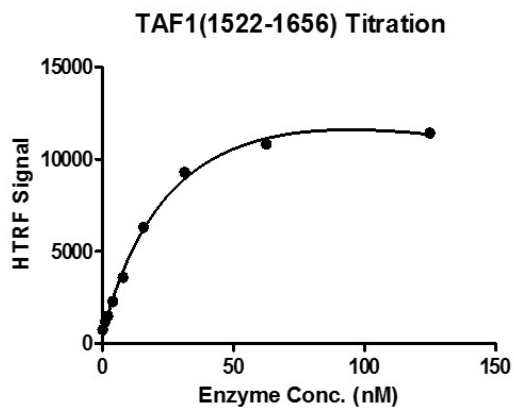


Recombinant TAF1 (1522-1656) protein gel.

TAF1 (1522-1656) protein was run on a 12.5% SDS-PAGE gel and stained with Coomassie Blue.

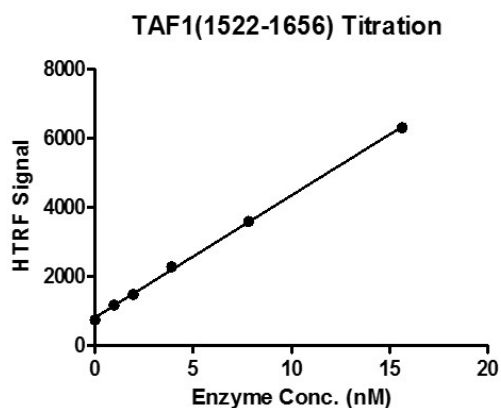
MW: 19.3 kDa

Purity: \geq 90%



Recombinant TAF1 (1522-1656) protein activity assay.

3 μ M histone peptide H3K18ac peptide was incubated with Recombinant TAF1 (1522-1656) protein in a reaction system containing 50 mM HEPES-NaOH pH 7.4, and 0.1% BSA for 1 hour at room temperature. Flag antibody and SA-XL665 (each at 1:100 in reaction buffer) was added for 30 min. All operations were performed at RT. HTRF assay was used for detection of reaction products.



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