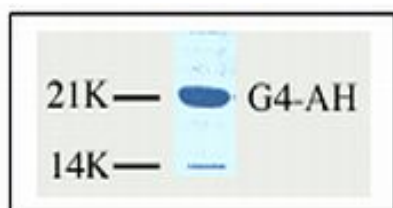


## GAL4-AH

Positive regulator of galactose inducible genes, GAL4(1-147) fused to an  $\alpha$ -Helix human, recombinant, *E. coli*

Cat. No.	Amount
PR-717	10 $\mu$ g



For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -80°C

### Avoid freeze / thaw cycles

### Form

Liquid. Supplied in 20 mM Tris-HCl, pH 7.9, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT, 20% glycerol.

### Activity

20 ng are sufficient for reconstituted transcription assay and 100 ng are sufficient for a protein-protein interaction assay.

### Purity

>95% by SDS-PAGE.

### Description

Transcriptional activity is greatly stimulated by promoter-specific activator proteins. These are modular proteins, consisting of a DNA-binding domain and a regulatory (activator) domain. The GAL4 protein of yeast activates the transcription of several genes involved in galactose metabolism. This event requires that GAL4 bind to upstream activation sites with the consensus sequence 5'-CGGN5(T/A)N5CCG-3'. A fragment of the GAL4 protein, comprising amino acids 1-147, binds DNA but fails to activate transcription. Linking of an acidic synthetic peptide, forming an  $\alpha$ -helix (AH), to this GAL4 DNA-binding domain, results in a protein with an amphiphathic structure. This fusion protein is able to activate transcription of a gene, bearing the GAL4 binding sites in an *in vitro* transcription system by targeting TFIIIB in the preinitiation complex.

Recombinant GAL4-AH is isolated from an *E. coli* strain that carries the coding sequence of the fused protein under the control of a T7 promoter.

GAL4-AH has been applied in *in vitro* transcription assays and protein-protein interaction assays.

Protein is greater than 90% homogeneous and contains no detectable protease, DNase, and RNase activity.

### Selected References:

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