

Recombinant HES1 protein

Catalog No: 82153, 82753**Expressed In:** *E. coli***Quantity:** 50, 1000 µg**Source:** Human

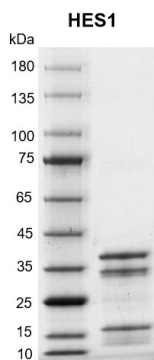
Buffer Contents: Recombinant HES1 protein is supplied in 25 mM Tris pH 8.0, 300 mM NaCl, 20% glycerol, 0.5 mM TCEP.

Background: **HES1 (Hairy and Enhancer of Split-1)** is a key transcriptional repressor and a primary effector of the Notch signaling pathway. It plays a fundamental role in cell fate determination, tissue development, and stem cell maintenance by forming negative feedback loops that oscillate and drive cellular differentiation. Its dysregulated expression disrupts normal developmental programs and is critically involved in the pathogenesis of various cancers and neurological disorders.

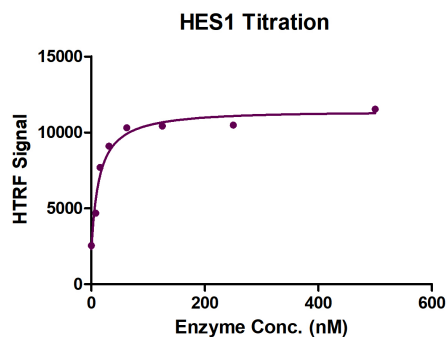
Protein Details: Recombinant HES1 protein that includes full length of human HES1 protein (accession number NP_005515.1) was expressed in *E. coli* and contains an N-terminal His tag with a molecular weight of 31.7 kDa. The purity of the protein is ≥ 60% by SDS-PAGE.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for this product is shown.

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 for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



Recombinant HES1 protein gel
 4-20% SDS-PAGE gel
 MW: 31.7 kDa
 Purity: >60%



HTRF Assay for Recombinant HES1 activity.

1 μ M substrate dsDNA (5' biotin TTACACGAGCACGAGTTA 3') was incubated with different concentrations of HES1 protein in reaction buffer containing 50 mM HEPES-NaOH pH 7.0, 0.1% BSA at room temperature for 1 hour . Anti-His antibody was used to detect reaction products.