

Recombinant NR1D1 protein

Catalog No: 82156, 82756

Expressed In: Baculovirus

Quantity: 20, 1000 µg

Source: Human

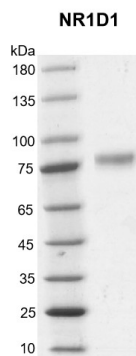
Buffer Contents: Recombinant NR1D1 protein is supplied in 25 mM HEPES pH 7.5, 300 mM NaCl, 20% glycerol, 0.04% Triton X-100, 0.5 mM TCEP.

Background: NR1D1 (Nuclear Receptor Subfamily 1 Group D Member 1), also known as Rev-Erb α , is a key transcriptional repressor that functions as a critical component of the mammalian circadian clock. It regulates the expression of core clock genes and integrates metabolic pathways, thereby orchestrating daily rhythms in glucose and lipid metabolism, inflammation, and cellular proliferation. Its dysfunction is implicated in circadian rhythm disorders, metabolic diseases, and certain cancers, highlighting its role as a pivotal link between circadian timing and physiological homeostasis.

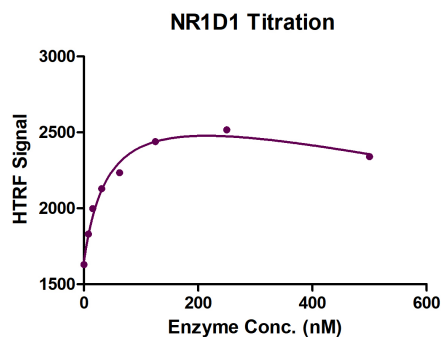
Protein Details: Recombinant NR1D1 protein was expressed in baculovirus expression system as the full-length protein (accession number NP_068370.1) with a N-terminal FLAG tag. The molecular weight of the protein is 68.08 kDa.

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 NR1D1 protein gel
4-20% SDS-PAGE gel
MW:68.08 kDa
Purity: >95%



HTRF Assay for Recombinant NR1D1 activity.

1 μ M substrate dsDNA (5' biotin CAGAGGTCAGTAGGTCAT 3') was incubated with different concentrations of NR1D1 protein in reaction buffer containing 50 mM HEPES-NaOH pH 7.0, 0.1% BSA at room temperature for 1 hour. Anti-FLAG antibody was used to detect reaction products.