

Recombinant BRD1 (556-688) protein

Catalog No: 31438, 31838**Expressed In:** *E. coli***Quantity:** 100, 1000 µg**Concentration:** 0.75 µg/µl**Source:** Human

Buffer Contents: Recombinant BRD1 (556-688) protein expressed in *E. coli* cells at a concentration of 0.75 µg/µl in 25 mM Tris pH 7.4, 150 mM NaCl, 5% glycerol.

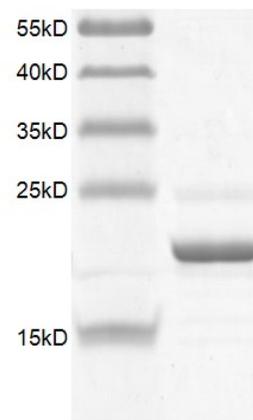
Background: **BRD1** (Bromodomain-containing protein 1) belongs to the BET subclass of proteins, which are characterized by two N-terminal bromodomains and one ET (Extra Terminal) domain. BRDs associate with chromatin through their bromodomains that recognize acetylated histone lysine residues. Bromodomains function as 'readers' of these epigenetic histone marks and regulate chromatin structure and gene expression by linking associated proteins to the acetylated nucleosomal targets. The ET domain functions as a protein binding motif and exerts atypical serine-kinase activity. The BET family consists of several members that function in the regulation of transcriptional activation and chromatin remodeling.

Protein Details: The peptide corresponding to amino acids 556-688 that contains the bromodomain sequences of BRD1 (accession number NP_055392.1) was expressed in *E. coli* and contains an N-terminal His tag and C-terminal FLAG tag with an observed molecular weight of 21.5 kDa. The recombinant protein is >86% pure by SDS-PAGE.

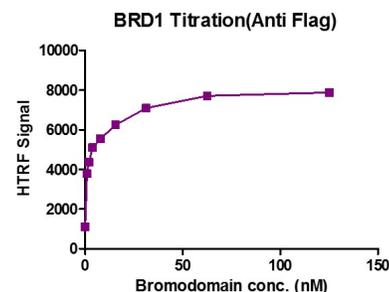
Application Notes: Recombinant BRD1 (556-688) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

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 BRD1 (556-688) protein gel.**

BRD1 (556-688) protein was run on a 12% SDS-PAGE gel and stained with Coomassie Blue.

**HTRF Assay for Recombinant BRD1 (556-688) activity.**

3.3 µM histone peptide H4K5/8/12/16 (4Ac) was incubated with BRD1 (556-688) protein in reaction buffer including 50 mM HEPES-NaOH pH 7.0, 0.1% BSA for 1 hour at room temperature. Anti-Flag antibody was used to detect reaction products.