

BRD3 recombinant protein

Recombinant BRD3 (306-416) protein, GST-Tag

CATALOG # AAA60161	HOST E Coli
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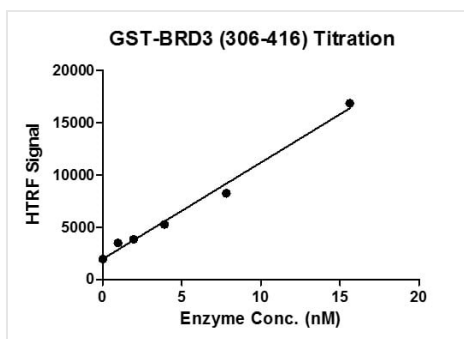
PRODUCT SYNONYMS

BRD3; Recombinant BRD3 (306-416) protein; GST-Tag; RING3-Like; Bromodomain Containing 3; ORFX; BRD3 recombinant protein

PRODUCT SPECIFICATIONS

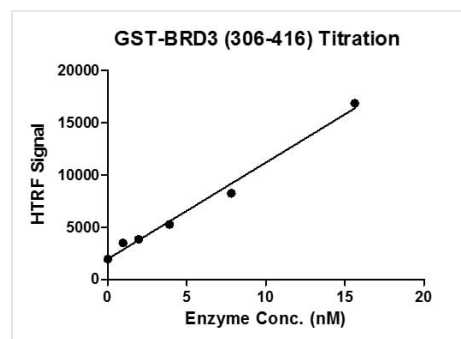
Host	E Coli
Form/Format	Recombinant BRD3 (306-416), GST-Tag protein is supplied in 25mM Tris-HCl pH8.0, 300mM NaCl, 10% glycerol.
Protein Species	Human
Tag	GST-Tag
Notes	This protein is suitable for use in binding assays, inhibitor screening, and selectivity profiling.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



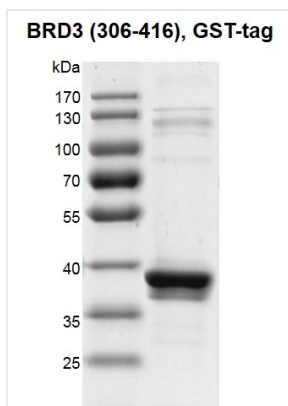
Application Data

HTRF assay for BRD3 (206-416), GST-Tag activity 3 μ M H4K5/8/12/16(ac4) peptide was incubated with different concentrations of BRD3 (306-416), GST-tag protein in a 10 μ l binding system containing 50 mM HEPES-NaOH pH 7.4, 0.1% BSA for 1 hour, then 10 μ l GST antibody and SA-XL665 mixture (each 1:100 dilution in Binding Buffer) were added to each reaction system and incubated for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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SDS-PAGE

Recombinant BRD3 (306-416), GST-Tag protein gel 10% SDS-PAGE Coomassie staining
MW: 39.4 kDa Purity: >85%

ADDITIONAL INFORMATION

Related Product Information for BRD3 recombinant protein

Short Description: Recombinant BRD3 (306-416), GST-Tag protein includes amino acids 306-416 (the second Bromodomain) of human BRD3 protein (accession number NP_031397.1); it was expressed in E Coli and contains an N-terminal GST-Tag with a molecular weight of 39.4 kDa. This protein is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

Background: Bromodomain-containing protein 3 (BRD3), also known as RING3L, belongs to the BET subclass of proteins 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 at least four members in mouse and human, BRD2 (also referred to as FSRG1, RING3), BRD3 (FSRG2, ORFX), BRD4 (FSRG4, MCAP/HUNK1), and BRDT (FSRG3, BRD6). BRD3 binds and regulates GATA1 in an acetylation-dependent manner. GATA1 is a key regulator of gene expression for erythroid and megakaryocyte-specific genes, and mutations in GATA1 have been associated with congenital anemias and megakaryoblastic leukemias. Interestingly, tight interaction of BRD3 with GATA1 requires multiple acetylation modifications, and structural data showed that two adjacent acetylation sites in GATA1 interact with a single bromodomain. BRD3 protein expression is induced in activated lymphocytes. Additionally, it is highly expressed in undifferentiated ES cells and expression is observed to drop upon endothelial differentiation. Altered expression levels of BRD3 have been observed in certain cancers, such as nasopharyngeal carcinomas and bladder cancer. BRD3 also interacts with LANA-1, the Kaposi's sarcoma-associated herpesvirus (KSHV) latency-associated nuclear antigen 1, which is required for the replication of episomal viral genomes. It shows binding specificity for acetylated H4K8 and H4K12/K16/ K20, as well as acetylated GATA1.

Product Categories/Family for BRD3 recombinant protein

[Recombinant Proteins](#); [Bromodomain](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	11067749
NCBI GeneID	8019
NCBI Accession #	NP_031397.1
NCBI GenBank Nucleotide #	NM_007371.3
UniProt Accession #	Q15059 ; Q4G5Y3 ; Q5T1R7 ; Q8N5M3 ; Q92645 ; B1APD9
Molecular Weight	79,542 Da
NCBI Official Full Name	bromodomain-containing protein 3
NCBI Official Synonym Full Names	bromodomain containing 3

NCBI Official Symbol	BRD3
NCBI Official Synonym Symbols	ORFX; RING3L
NCBI Protein Information	bromodomain-containing protein 3; RING3-like protein; bromodomain-containing 3
UniProt Protein Name	Bromodomain-containing protein 3
UniProt Gene Name	BRD3
UniProt Synonym Gene Names	KIAA0043; RING3L
UniProt Entry Name	BRD3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/brd3-recombinant-protein-e-coli/60161>