

BRD4 recombinant protein

Recombinant BRD4 (333-460) protein

CATALOG #
AAA59688

HOST
E Coli

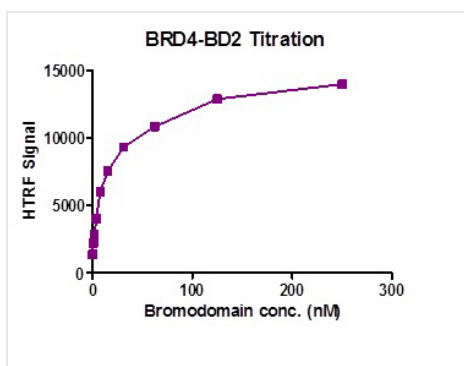
PRODUCT SYNONYMS

BRD4; Recombinant BRD4 (333-460) protein; CAP; MCAP; HUNK1; HUNKI; BRD4 recombinant protein

PRODUCT SPECIFICATIONS

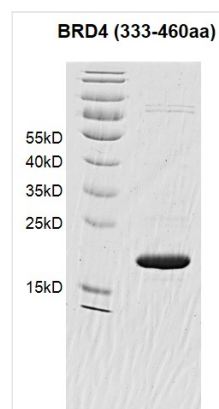
Host	E Coli
Purity/Purification	The recombinant protein is >87% pure by SDS-PAGE.
Form/Format	Recombinant BRD4 (333-460) protein expressed in E Coli and supplied in 25mM HEPES pH7.5, 150mM NaCl and 5% glycerol.
Protein Species	Human
Tag	DYKDDDDK-Tag, His-Tag
Notes	Recombinant BRD4 (333-460) is suitable 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

Recombinant BRD4 (333-460) HTRF activity assay 3.3 uM histone peptide H4K5/8/12/16(4Ac) was incubated with BRD4 (333-460) protein in reaction buffer including 50mM HEPES-NaOH pH 7.0, 0.1% BSA for 1 hour at room temperature. Anti-DYKDDDDK antibody was used to detect reaction products



SDS-PAGE

Recombinant BRD4 (333-460) protein gel. BRD4 (333-460) protein was run on an SDS-PAGE gel and stained with Coomassie blue.

ADDITIONAL INFORMATION

Related Product Information for BRD4 recombinant protein	Short Description: The peptide corresponding to amino acids 333-460 that contains the bromodomain sequences of BRD4 (accession number NP_490597.1) was expressed in E Coli and contains an N-terminal His-tag and C-terminal DYKDDDDK tag with an observed molecular weight of 20.9 kDa. Bromodomain-containing protein 4 (BRD4) 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 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). BRD proteins are related to the female Sterile Homeotic protein gene in Drosophila, a gene required maternally for proper expression of other homeotic genes, such as Ubx, which is involved in pattern formation. BRD4 has been identified recently as a therapeutic target in many cancers, including acute myeloid leukemia, multiple myeloma, Burkitt's lymphoma, NUT midline carcinoma, colon cancer, and breast cancer. BRD4 regulates the transcription of oncogenes, HIV, and human papilloma virus (HPV). It has been shown to bind and phosphorylate RNA pol II, which implicates its involvement in the regulation of eukaryotic transcription. Recombinant BRD4 (333-460) can be used in binding assays and inhibitor screening. Background: BRD4 (Bromodomain-containing protein 4) 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 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). BRD proteins are related to the female Sterile Homeotic protein gene in Drosophila, a gene required maternally for proper expression of other homeotic genes, such as Ubx, which is involved in pattern formation. BRD4 has been identified recently as a therapeutic target in many cancers, including acute myeloid leukemia, multiple myeloma, Burkitt's lymphoma, NUT midline carcinoma, colon cancer, and breast cancer. BRD4 regulates the transcription of oncogenes, HIV, and human papilloma virus (HPV). It has been shown to bind and phosphorylate RNA pol II, which implicates its involvement in the regulation of eukaryotic transcription.
Product Categories/Family for BRD4 recombinant protein	Recombinant Proteins; Bromodomain

NCBI AND UNIPROT INFORMATION

NCBI GI #	19718731
NCBI GeneID	23476
NCBI Accession #	NP_490597.1; NP_055114.1; NP_065254.3
NCBI GenBank Nucleotide #	NM_058243.2
UniProt Accession #	O60885; O60433; Q4G0X8; Q86YS8; Q96PD3
Molecular Weight	155.8kDa
NCBI Official Full Name	bromodomain-containing protein 4 isoform long
NCBI Official Synonym Full Names	bromodomain containing 4
NCBI Official Symbol	BRD4
NCBI Official Synonym Symbols	CAP; MCAP; HUNK1; HUNKI
NCBI Protein Information	bromodomain-containing protein 4
UniProt Protein Name	Bromodomain-containing protein 4
UniProt Gene Name	BRD4
UniProt Synonym Gene Names	HUNK1

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/brd4-recombinant-protein-e-coli/59688>