

Recombinant Human BRD4, GST-tagged

Cat. No. BRD4-1904H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human BRD4 (65-459 aa) was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	65-459 aa
Description	The acetylation of histone lysine residues plays a crucial role in the epigenetic regulation of gene transcription. A bromodomain is a protein domain that recognizes acetylated lysine residues such as those on the N-terminal tails of histones. This recognition is often a prerequisite for protein-histone association and chromatin remodeling. These domains function in the linking of protein complexes to acetylated nucleosomes, thereby controlling chromatin structure and gene expression. Thus, bromodomains serve as "readers" of histone acetylation marks regulating the transcription of target promoters. The BET family of proteins, defined by tandem Bromodomains and an Extra Terminal domain, include BRD2, BRD3, BRD4, and BRDT. The BET proteins play a key role in many cellular processes, including inflammatory gene expression, mitosis, and viral/host interactions. The isolated individual or tandem bromodomains of BRD2 and BRD4 have been shown to bind acetylated histone tails, serving to couple histone acetylation marks to the transcriptional regulation of target promoters. Small molecule inhibitors of these interactions hold promise as useful therapeutics for human disease. This protein can be used for the study of bromodomain binding assays, screening inhibitors, and

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	selectivity profiling.
Appearance	Liquid
Form	50 mM Tris, pH 7.5, containing 500 mM sodium chloride, 5% glycerol, and 5 mM β -mercaptoethanol.
Molecular Mass	71.2 kDa (65-459 aa + GST Tag)
Purity	$\geq 90\%$ by SDS - PAGE
Usage	For Research Use Only! Not For Use in Humans.
Storage	Store at -80°C . Avoid repeated freeze and thaw cycles. Stable for 6 months.

GENE INFORMATION

Gene Name	BRD4 bromodomain containing 4 [Homo sapiens (human)]
Official Symbol	BRD4
Synonyms	BRD4; bromodomain containing 4; CAP; MCAP; HUNK1; HUNKI; bromodomain-containing protein 4; bromodomain-containing 4; chromosome-associated protein; EC 3.1.1.31
Gene ID	23476
mRNA Refseq	NM_014299
Protein Refseq	NP_055114

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MIM	608749
UniProt ID	O60885
Chromosome Location	19p13.1
Function	DNA binding; protein binding

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