

Product Information



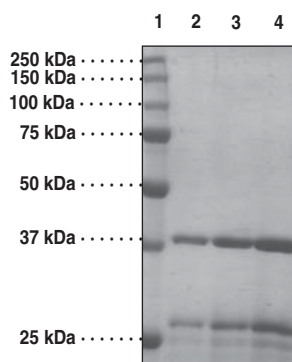
BRD4 bromodomain 1 (human recombinant; GST-tagged)

Item No. 11068 • Batch No. XXXXXX

Synonyms: Bromodomain containing protein 4, HUNK1, MCAP
Source: Recombinant N-terminal GST-tagged protein expressed in *E. coli*
Amino Acids: 49-170
Genbank Accession No.: NP_490597
M_r: 41.4 kDa
Purity: ≥60% estimated by SDS-PAGE
Stability: ≥6 months at -80°C
Supplied in: 50 mM Tris, pH 7.5, containing 500 mM sodium chloride, 5% glycerol, and 5 mM β-mercaptoethanol

Protein Concentration: *batch specific* mg/ml

The acetylation of histone lysine residues plays a crucial role in the epigenetic regulation of gene transcription. Acetylated lysine residues are recognized by a small protein domain known as a bromodomain.¹ These domains function in the linking of protein complexes to acetylated nucleosomes, thereby controlling chromatin structure and gene expression. The BET family of proteins, defined by tandem Bromodomains and an Extra Terminal domain, include BRD2, BRD3, BRD4, and BRDT.² The BET proteins play a key role in many cellular processes, including inflammatory gene expression, mitosis, and viral/host interactions.³⁻⁵ 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.^{4,6-9} Small molecule inhibitors of these interactions hold promise as useful therapeutics for human disease.¹⁰⁻¹²



Lane 1: MW Markers
Lane 2: BRD4 Domain 1-GST (1 µg)
Lane 3: BRD4 Domain 1-GST (2 µg)
Lane 4: BRD4 Domain 1-GST (4 µg)

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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References

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