

BRD2 bromodomain (1-455 aa) (His-Tag), human recombinant

CATALOG #: 7406-100 100 µg

ALTERNATE NAMES: RING3, RNF3, Bromodomain containing 4, D6S113E, FSH, FSRG1, NAT, RING3, RNF3

SOURCE: E. coli

PURITY: > 90% by SDS-PAGE

MOL. WEIGHT: 52.8 kDa (478 aa, 1-455 aa + His Tag), confirmed by MALDI-TOF.

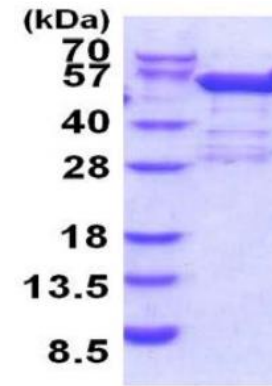
FORM: Liquid

FORMULATION: 1 mg/ml in Phosphate buffer saline (pH 7.4) containing 10% glycerol and 1 mM DTT.

STORAGE CONDITIONS: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

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 selectivity profiling.

AMINO ACID SEQUENCE: MGSSHHHHHH SSGLVPRGSH MGSMLQNVTP
 HNKLPGEGNA GLLGLGPEAA APGKRIRKPS LLYEGFESPT MASVPALQLT
 PANPPPPEVS NPKKPGRVTN QLQYLHKVVM KALWKHQFAW PFRQPVDVAVK
 LGLPDYHKII KQPMDMGTIK RRLENNYYWA ASECMQDFNT MFTNCYIYNK
 PTDDIVLMAQ TLEKIFLQKV ASMPQEEQEL VVTIPKNESHK KGAKLAALQG
 SVTSAHQVPA VSSVSHTALY TPPPEIPTTV LNIPHPVIS SPLKSLHSA GPPLAVTAA
 PPAQPLAKKK GVKRKADTTT PTPTAILAPG SPASPPGSLE PKAARLPPMR
 RESGRPIKPP RKDLPDSQQQ HQSSKKGKLS EQLKHCNGIL KELLSSKHAA
 YAWPFYKPV D ASALGLHDYH DIIKHPMDLS TVKRKMENRD YRDAQEFAAD
 VRLMFSNCYK YNPPDHDVVA MARKLQDVFE FRYAKMPD



15% SDS-PAGE (3µg)
BRD2, human recombinant

RELATED PRODUCTS:

- Recombinant Human BrdT (Cat. No. 7641-20, 100, -1000)
- Recombinant Human BRD4 (Cat. No. 7644-20, 100, -1000)
- Human recombinant BRD2 bromodomain 1 (Cat. No. 7646-20, 100)
- Human recombinant BRD2 bromodomains 1 and 2 (Cat. No. 7647-20, 100)
- Human recombinant BRD2 bromodomain 2 (Cat. No. 7648-20, 100)
- Human recombinant BRD9 bromodomain (Cat. No. 7649-20, 100)
- Human recombinant BRG1 bromodomain (Cat. No. 7650-20, 100)
- Bromodomain Inhibitor, (+)-JQ1 (Cat. No. 2070-1, -5)
- BRD8 Antibody (Cat. No. 3738-100)
- BRD8 Antibody (Cat. No. 3506-100)
- BRD8 Blocking Peptide (Cat. No. 3506BP-50)

FOR RESEARCH USE ONLY! Not to be used in humans.