

Catalog No: 31443, 31843Quantity: 100, 1000 μgExpressed In: E. coliConcentration: 2 μg/μl

Source: Human

**Buffer Contents:** Recombinant BRWD3 (1295-1443) protein was expressed in *E. coli* cells at a concentration of 2  $\mu$ g/ $\mu$ l in 25 mM Tris pH 7.4, 300 mM NaCl, 5% glycerol.

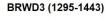
Background: Bromodomain and WD repeat domain containing 3 (BRWD3) is a member of the WD repeat protein family. WD repeats are minimally conserved regions of approximately 40 amino acids typically bracketed by gly-his and trp-asp (GH-WD) residues which may facilitate formation of heterotrimeric or multiprotein complexes. Members of this family are involved in a variety of cellular processes including cell cycle progression, signal transduction, apoptosis, and gene regulation. This protein contains a bromodomain and multiple WD repeats. The bromodomain functions as a 'reader' of epigenetic histone marks and regulates chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. Mutations in BRWD3 cause mental retardation X-linked type 93, which is also referred to as mental retardation X-linked with macrocephaly. This gene is also associated with translocations in patients with B-cell chronic lymphocytic leukemia (B-CLL).

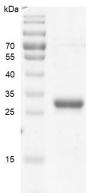
**Protein Details:** The peptide corresponding to amino acids 1295-1443 that contains the bromodomain sequences of BRWD3 (accession number NP\_694984.4) was expressed in *E. coli* and contains an N-terminal His tag and C-terminal FLAG tag with an observed molecular weight of 23.4 kDa. The recombinant protein is ≥ 90% pure by SDS-PAGE.

**Application Notes:** Recombinant BRWD3 (1295-1443) is suitable for use in binding assays, inhibitor screening, and selectivity profiling.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

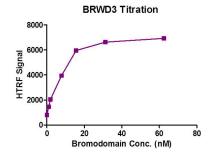
This product is for research use only and is not for use in diagnostic procedures.





## Recombinant BRWD3 (1295-1443) protein gel.

BRWD3 (1295-1443) protein was run on a 12% SDS-PAGE gel and stained with Coomassie Blue.



## Recombinant BRWD3 (1295-1443) HTRF activity assay.

3.3 µM histone peptide H4K5/8/12/16 (4Ac) was incubated with BRWD3 (1295-1443) in reaction buffer including 50 mM HEPES-NaOH pH 7.0, 0.1% BSA for 1 hour at room temperature. Anti-FLAG antibody was used to detect reaction products.