### Recombinant BRWD1 (1310-1430) protein



Catalog No: 31440, 31840Quantity: 100, 1000 μgExpressed In: E. coliConcentration: 1 μg/μl

Source: Human

**Buffer Contents:** Recombinant BRWD1 (1310-1430) protein is supplied at a concentration of 1  $\mu$ g/ $\mu$ l in 25 mM Tris pH 8.0, 500 mM NaCl, 20% glycerol.

**Background:** BRWD1 (Bromodomain and WD repeat domain containing 1) 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 2 bromodomains 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. In mouse, this BRWD1 is a nuclear protein that has a polyglutamine-containing region that functions as a transcriptional activation domain. This domain associates with a component of the SWI/SNF chromatin remodeling complex and may function to regulate chromatin remodeling. BRWD1 plays a role in the regulation of cell morphology and cytoskeletal organization and is also required in the control of cell shape.

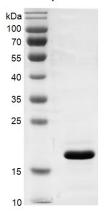
**Protein Details:** The protein corresponding to amino acids 1310-1430 that contains the bromodomain sequence of human BRWD1 protein (accession number NP\_061836.2) was expressed in *E. coli* and contains an N-terminal His tag and C-terminal FLAG tag with a molecular weight of 18.97 kDa. The purity of the protein is >92% by SDS-PAGE.

**Application Notes:** Recombinant BRWD1 (1310-1430) 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.

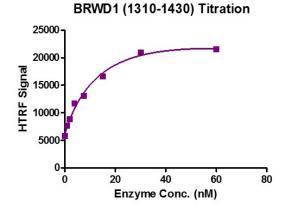
#### BRWD1 (1310-1430)



#### Recombinant BRWD1 (1310-1430) protein gel.

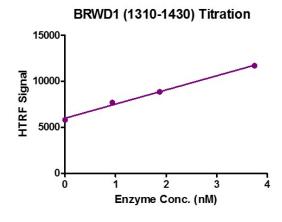
BRWD1 (1310-1430) protein was run on a 12% SDS-PAGE gel and stained with Coomassie Blue.

MW: 19 kDa Purity: > 92%



## HTRF Assay for Recombinant BRWD1 (1310-1430) protein activity.

 $3~\mu M$  histone peptide H4K5/8/12/16 (4Ac) was incubated with BRWD1 (1310-1430) protein 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.



# HTRF Assay for Recombinant BRWD1 (1310-1430) protein activity.

3 μM histone peptide H4K5/8/12/16 (4Ac) was incubated with BRWD1 (1310-1430) protein 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.