

# PRODUCT INFORMATION



## BRDT bromodomain 2 (human recombinant)

Item No. 11649

### Overview and Properties

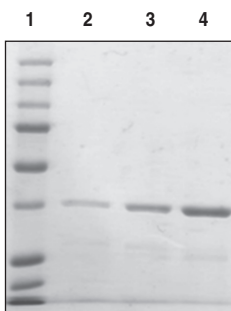
**Synonyms:** BRD6, Bromodomain testis-specific protein, Cancer/testis antigen 9, CT9, RING3-like protein  
**Source:** Recombinant N-terminal GST-tagged protein expressed in *E. coli*  
**Amino Acids:** 259-379 (partial protein)  
**Molecular Weight:** 41.2 kDa  
**Storage:** -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein  
**Stability:** ≥2 years  
**Purity:** *batch specific* (≥90% estimated by SDS-PAGE)  
**Supplied in:** 50 mM Tris, pH 7.5, with 500 mM sodium chloride, 5% glycerol, and 5 mM β-mercaptoethanol

### Protein

**Concentration:** *batch specific* mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Image



Lane 1: MW Markers  
Lane 2: BRDT bd 2 (1 µg)  
Lane 3: BRDT bd 2 (2 µg)  
Lane 4: BRDT bd 2 (4 µg)

*Representative gel image shown; actual purity may vary between each batch.*

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/16/2021

CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM

# PRODUCT INFORMATION



## Description

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.<sup>1</sup> 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.<sup>2</sup>

Bromodomain testis specific (BRDT) shares homology with the RING3 protein. The two bromodomains of BRDT recognize acetylated histone H4. Loss of BRDT leads to defects in spermatogenesis.<sup>3</sup> In addition to testis specific expression, BRDT was found in approximately 20% of non-small cell lung cancers.<sup>4</sup>

## References

1. Mujtaba, S., Zeng, L., and Zhou, M.-M. Structure and acetyl-lysine recognition of the bromodomain. *Oncogene* **26(37)**, 5521-5527 (2011).
2. Muller, S., Filippakopoulos, P., and Knapp, S. Bromodomains as therapeutic targets. *Expert Rev. Mol. Med.* **13**, 1-21 (2011).
3. Barda, S., Paz, G., Yogev, L., *et al.* Expression of BET genes in testis of men with different spermatogenic impairments. *Fertil. Steril.* **97(1)**, 46-52 (2012).
4. Scanlan, M.J., Altorki, N.K., Gure, A.O., *et al.* Expression of cancer-testis antigens in lung cancer: Definition of bromodomain testis-specific gene (BRDT) as a new CT gene, CT9. *Cancer Lett.* **150(2)**, 155-164 (2000).

CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM