

PRODUCT INFORMATION



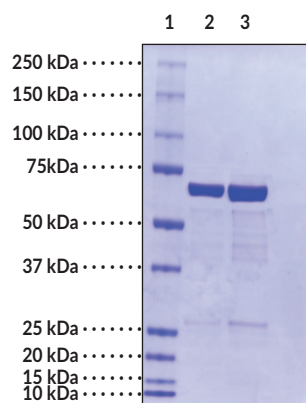
BRDT bromodomains 1 and 2 (human recombinant)

Item No. 14492

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: 21-379
Storage: -80°C (as supplied)
Stability: ≥2 years
Purity: **batch specific** (≥85% estimated by SDS-PAGE); avoid freeze/thaw cycles by aliquoting protein.
Supplied in: 10 mM HEPES, pH 7.5, with 500 mM sodium chloride and 5% glycerol
Protein Concentration: **batch specific** mg/ml
Activity: **batch specific** U/ml
Specific Activity: **batch specific** U/mg

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

Image



Lane 1: MW Markers

Lane 2: BRDT bromodomains 1 and 2 (2 µg)

Lane 3: BRDT bromodomains 1 and 2 (4 µg)

SDS-PAGE Analysis of BRDT bromodomains 1 and 2.

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
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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.¹ 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.²

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.³ In addition to testis specific expression, BRDT was found in approximately 20% of non-small cell lung cancers.⁴

References

1. Mujtaba, S., Zeng, L., and Zhou, M.-M. Structure and acetyl-lysine recognition of the bromodomain. *Oncogene* **26**, 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).

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