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)

Batch specific information can be found on the Certificate of Analysis or by contacting Technical Support

Molecular Weight: 41.2 kDa
Storage: -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein
Stability: ≥1 year
Purity: *batch specific* (≥90%)
Supplied in: 50 mM Tris, pH 7.5, containing 500 mM sodium chloride, 5% glycerol and 5 mM β-mercaptoethanol

Protein Concentration: *batch specific* mg/ml

Image

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
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<th>4</th>
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</thead>
<tbody>
<tr>
<td>Lane 1: MW Markers</td>
<td>Lane 2: BRDT bd 2 (1 µg)</td>
<td>Lane 3: BRDT bd 2 (2 µg)</td>
<td>Lane 4: BRDT bd 2 (4 µg)</td>
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</tbody>
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*Representative gel image shown; actual purity may vary between each batch.*
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