

BRD6 / BRDT Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF2307a

Specification

BRD6 / BRDT Antibody (C-Term) - Product Information

Application

Primary Accession <u>Q58F21</u>

Other Accession <u>NP_001717.2</u>, <u>NP_997072.1</u>, <u>676</u>, <u>114642</u>

(mouse)

Predicted Human, Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 107954

BRD6 / BRDT Antibody (C-Term) - Additional Information

Gene ID 676

Other Names

Bromodomain testis-specific protein, Cancer/testis antigen 9, CT9, RING3-like protein, BRDT

Dilution

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BRD6 / BRDT Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

BRD6 / BRDT Antibody (C-Term) - Protein Information

Name BRDT

Function

Testis-specific chromatin protein that specifically binds histone H4 acetylated at 'Lys-5' and 'Lys-8' (H4K5ac and H4K8ac, respectively) and plays a key role in spermatogenesis (PubMed:22464331, PubMed:22901802). Required in



late pachytene spermatocytes: plays a role in meiotic and post-meiotic cells by binding to acetylated histones at the promoter of specific meiotic and post-meiotic genes, facilitating their activation at the appropriate time (PubMed:22901802). In the post-meiotic phase of spermatogenesis, binds to hyperacetylated histones and participates in their general removal from DNA (PubMed:22901802). Also recognizes and binds a subset of butyrylated histones: able to bind histone H4 butyrylated at 'Lys-8' (H4K8ac), while it is not able to bind H4 butyrylated at 'Lys-5' (H4K5ac) (By similarity). Also acts as a component of the splicing machinery in pachytene spermatocytes and round spermatids and participates in 3'-UTR truncation of specific mRNAs in post-meiotic spermatids (By similarity). Required for chromocenter organization, a structure comprised of peri-centromeric heterochromatin.

Cellular Location

Nucleus. Note=Detected on chromatin {ECO:0000250|UniProtKB:Q91Y44}

Tissue Location

Testis-specific. A 3-fold higher expression is seen in adult testis than in embryo testis. Expression seems to be correlated with histone H4 hyperacetylation during the haploid phase of spermatogenesis (spermiogenesis). No expression, or very low expression is seen in patients' testes with abnormal spermatogenesis. Expressed in cancers such as non-small cell lung cancer and squamous cell carcinomas of the head and neck as well as of esophagus, but not in melanoma or in cancers of the colon, breast, kidney and bladder

BRD6 / BRDT Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BRD6 / BRDT Antibody (C-Term) - Images

BRD6 / BRDT Antibody (C-Term) - Background

Variants (NP 001717.2; NP 997072.1) encode the same protein.

BRD6 / BRDT Antibody (C-Term) - References

Identification and characterization of BRDT: A testis-specific gene related to the bromodomain genes RING3 and Drosophila fsh. Jones MH, Numata M, Shimane M. Genomics. 1997 Nov 1;45(3):529-34. PMID: 9367677