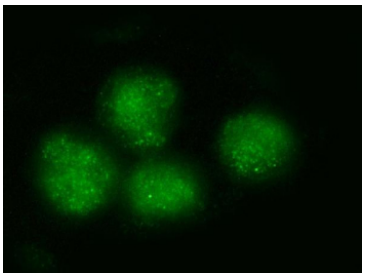
BRD4 Antibody / Bromodomain-containing protein 4 (RQ6454)

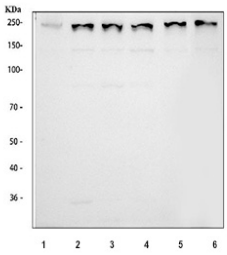
Catalog No.	Formulation	Size
RQ6454	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O60885
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This BRD4 antibody is available for research use only.



Immunofluorescent staining of FFPE human PC-3 cells with BRD4 antibody (green). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human 293T, 2) human Jurkat, 3) human HepG2, 4) human MCF7, 5) rat PC-12 and 6) NIH 3T3 cell lysate lysate with BRD4 antibody. Predicted molecular weight ~156 kDa (long form) but has been observed at 200+ kDa.

Description

BRD4 is a member of the BET family of chromatin readers that bind acetyl-lysine marks on histone tails via 2 bromodomains and an extra-terminal domain. By recruiting and stabilizing P-TEFb (CDK9-Cyclin T1) at promoters and enhancers, BRD4 drives RNA polymerase II pause release and productive elongation, integrating signaling cues with rapid transcriptional programs in development, immune activation, and stress responses. The **BRD4 antibody** supports these studies by enabling precise detection of endogenous BRD4 in relevant models.

Dysregulated BRD4 activity contributes to oncogenic transcription, super-enhancer addiction, inflammation, and therapy resistance. Aberrant occupancy of BRD4 at lineage-defining regulatory elements sustains high-output expression of survival and proliferation genes across multiple cancer types. BRD4 has also been linked to DNA damage responses and chromatin organization, positioning it as a central node in epigenetic control and a target for small-molecule inhibitors.

The BRD4 antibody is widely used in western blot, immunofluorescence, immunohistochemistry, immunoprecipitation, and chromatin-focused assays to quantify protein abundance, map subcellular and chromatin-associated localization, and monitor pathway modulation under genetic or pharmacologic perturbation. With high specificity and consistent performance, the BRD4 antibody enables rigorous analysis of transcriptional elongation mechanisms, epigenetic regulation, and disease biology.

Application Notes

Optimal dilution of the BRD4 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids A802-R1163) was used at the immunogen for the BRD4 antibody. The antibody is not suitable for the detection of the short form of the protein.

Storage

After reconstitution, the BRD4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.