

## Datasheet for ABIN7127371

# Recombinant anti-BRD4 antibody





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Overview	
Quantity:	100 μL
Target:	BRD4
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This BRD4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)
Product Details	
Immunogen:	A synthesized peptide derived from human Brd4
Clone:	1E5

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Clone:	1E5
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

# Target Details

Target:	BRD4
Alternative Name:	BRD4 (BRD4 Products)
Background:	Background: Chromatin reader protein that recognizes and binds acetylated histones and plays

a key role in transmission of epigenetic memory across cell divisions and transcription regulation. Remains associated with acetylated chromatin throughout the entire cell cycle and provides epigenetic memory for postmitotic G1 gene transcription by preserving acetylated chromatin status and maintaining high-order chromatin structure. During interphase, plays a key role in regulating the transcription of signal-inducible genes by associating with the P-TEFb complex and recruiting it to promoters: BRD4 is required to form the transcriptionally active P-TEFb complex by displacing negative regulators such as HEXIM1 and 7SKsnRNA complex from P-TEFb, thereby transforming it into an active form that can then phosphorylate the C-terminal domain (CTD) of RNA polymerase II. Promotes phosphorylation of 'Ser-2' of the C-terminal domain (CTD) of RNA polymerase II. According to a report, directly acts as an atypical protein kinase and mediates phosphorylation of 'Ser-2' of the C-terminal domain (CTD) of RNA polymerase II, these data however need additional evidences in vivo (PubMed:22509028). In addition to acetylated histones, also recognizes and binds acetylated RELA, leading to further recruitment of the P-TEFb complex and subsequent activation of NF-kappa-B. Also acts as a regulator of p53/TP53-mediated transcription: following phosphorylation by CK2, recruited to p53/TP53 specific target promoters.

Aliases: Bromodomain-containing protein 4 (Protein HUNK1), BRD4, HUNK1

UniProt:

060885

Pathways:

Chromatin Binding, SARS-CoV-2 Protein Interactome

#### **Application Details**

Application Notes: Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200,

Restrictions: For Research Use only

#### Handling

Format:

Liquid

Buffer:

Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Preservative:

Sodium azide

Precaution of Use:

This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

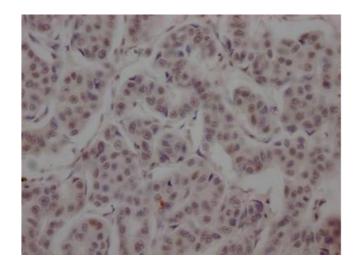
Storage:

-20 °C,-80 °C

Storage Comment:

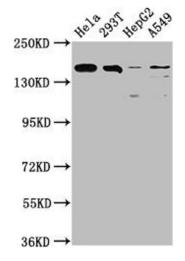
Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

### **Images**



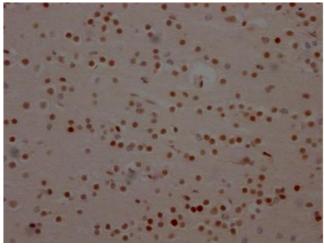
### Immunohistochemistry

Image 1. IHC image of ABIN7127371 diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.



#### **Western Blotting**

Image 2. Western Blot Positive WB detected in: Hela whole cell lysate, 293T whole cell lysate, HepG2 whole cell lysate, A549 whole cell lysate All lanes: BRD4 antibody at 1:1500 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 153, 81, 89 kDa Observed band size: 153 kDa



#### **Immunohistochemistry**

Image 3. IHC image of ABIN7127371 diluted at 1:100 and staining in paraffin-embedded human brain tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.