


## Product datasheet

# Anti-CDT1/DUP antibody ab70829

★★★★☆ [4 Abreviews](#) [10 References](#) [3 Images](#)

### Overview

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<b>Product name</b>	Anti-CDT1/DUP antibody
<b>Description</b>	Rabbit polyclonal to CDT1/DUP
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Chimpanzee 
<b>Immunogen</b>	Synthetic peptide corresponding to Human CDT1/DUP (C terminal). Database link: <a href="#">NP_112190.1</a>
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7 Preservative: 0.09% Sodium azide Constituents: 1.764% Sodium citrate, 1.815% Tris, 0.021% PBS
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab70829 was affinity purified using an epitope specific to CDT1/DUP immobilized on solid support.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab70829 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at 2-5 µg/mg of lysate.
IHC-P		1/1000 - 1/5000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★ (2)	1/1000 - 1/2500. Detects a band of approximately 63 kDa (predicted molecular weight: 63 kDa).

## Target

### Function

Cooperates with CDC6 to promote the loading of the mini-chromosome maintenance complex onto chromatin to form the pre-replication complex necessary to initiate DNA replication. Binds DNA in a sequence-, strand-, and conformation-independent manner. Potential oncogene.

### Sequence similarities

Belongs to the Cdt1 family.

### Developmental stage

Present during G1 and early S phase of the cell cycle. Degraded during the late S, G2, and M phases.

### Domain

The PIP-box K+4 motif mediates both the interaction with PCNA and the recruitment of the DCX(DTL) complex: while the PIP-box interacts with PCNA, the presence of the K+4 submotif, recruits the DCX(DTL) complex, leading to its ubiquitination.

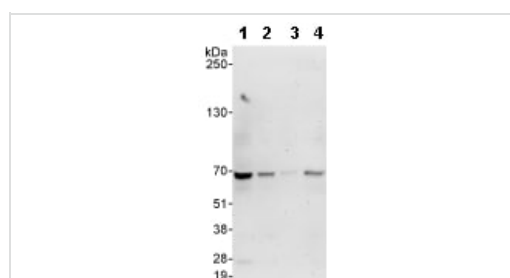
### Post-translational modifications

Ubiquitinated by the DCX(DTL) complex, also named CRL4(CDT2) complex, in response to DNA damage, leading to its degradation. Ubiquitination by the DCX(DTL) complex is necessary to ensure proper cell cycle regulation and is PCNA-dependent: interacts with PCNA via its PIP-box, while the presence of the containing the 'K+4' motif in the PIP box, recruit the DCX(DTL) complex, leading to its degradation. The interaction with GMNN protects it against ubiquitination. Phosphorylated by cyclin A-dependent kinases which results in the binding of CDT1 to the F-box protein SKP2 and subsequent degradation. Binding to GMNN is not affected by phosphorylation.

### Cellular localization

Nucleus.

## Images



Western blot - Anti-CDT1/DUP antibody (ab70829)

**All lanes** : Anti-CDT1/DUP antibody (ab70829) at 1 µg/ml

**Lane 1** : HeLa whole cell lysate at 50 µg

**Lane 2** : HeLa whole cell lysate at 15 µg

**Lane 3** : HeLa whole cell lysate at 5 µg

**Lane 4** : 293T whole cell lysate at 50 µg

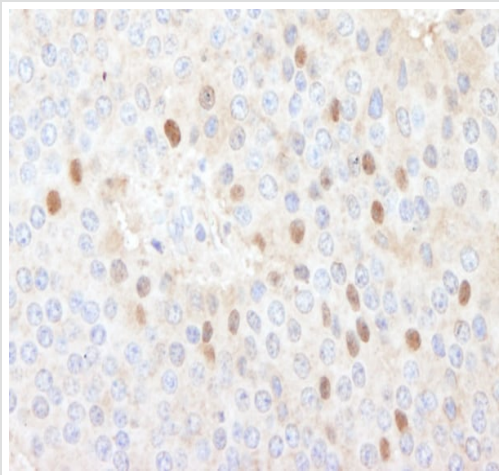
Developed using the ECL technique.

**Predicted band size:** 63 kDa

**Observed band size:** 63 kDa

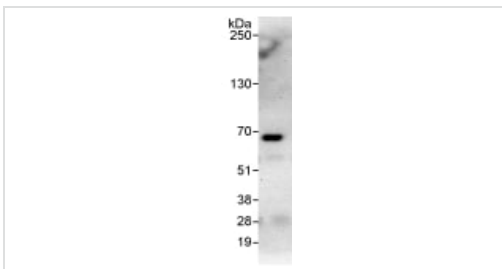
**Exposure time:** 3 minutes

Secondary antibody - anti-rabbit HRP (**ab6721**)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human islet cell carcinoma tissue labelling CDT1/DUP with ab70829 at 1/1000 (1 µg/ml). Detection: DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDT1/DUP antibody (ab70829)



Detection of CDT1/DUP by Western Blot of Immunoprecipitate. ab70829 at 1 µg/ml staining CDT1/DUP in HeLa whole cell lysate immunoprecipitated using ab70829 at 3 µg/mg lysate (1 mg/IP; 20% of IP loaded/lane).

Secondary antibody anti-rabbit HRP (**ab6721**)

Detection: Chemiluminescence with exposure time of 3 minutes.

Immunoprecipitation - Anti-CDT1/DUP antibody (ab70829)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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