# abcam

# Product datasheet

# Anti-Weel antibody ab137377

### 1 Abreviews 8 References 2 Images

Overview

Product name Anti-Wee1 antibody

**Description** Rabbit polyclonal to Wee1

Host species Rabbit

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Human

Immunogen Recombinant fragment, corresponding to a region within internal amino acids 274 and 506 of

Human Wee1.

Positive control WB: Jurkat, Raji, NCI-H929 whole cell lysate. IHC:CL1-0 xenograft tissue.

**General notes**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.

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&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

Storage buffer pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

1

#### The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab137377 in the following tested applications.

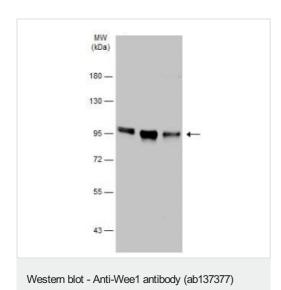
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 72 kDa.
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Alternatively antigen retrieval using heat mediated Tris/EDTA buffer (pH 8.0) may be used.

# **Target**

Function	Acts as a negative regulator of entry into mitosis (G2 to M transition) by protecting the nucleus from cytoplasmically activated cyclin B1-complexed CDK1 before the onset of mitosis by mediating phosphorylation of CDK1 on 'Tyr-15'. Specifically phosphorylates and inactivates cyclin B1-complexed CDK1 reaching a maximum during G2 phase and a minimum as cells enter M phase. Phosphorylation of cyclin B1-CDK1 occurs exclusively on 'Tyr-15' and phosphorylation of monomeric CDK1 does not occur. Its activity increases during S and G2 phases and decreases at M phase when it is hyperphosphorylated. A correlated decrease in protein level occurs at M/G1 phase, probably due to its degradation.	
Sequence similarities	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. WEE1 subfamily. Contains 1 protein kinase domain.	
Post-translational modifications	Phosphorylated during M and G1 phases. Also autophosphorylated.  Ubiquitinated and degraded at the onset of G2/M phase.	
Cellular localization	Nucleus.	

#### **Images**



All lanes: Anti-Wee1 antibody (ab137377) at 1/1000 dilution

**Lane 1**: Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 2: Raji (human Burkitt's lymphoma cell line) whole cell lysate

Lane 3 : NCI-H929 (human bone marrow lymphoblast cell line)

whole cell lysate

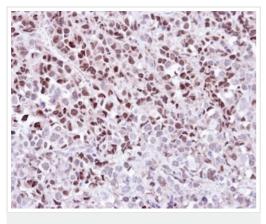
Lysates/proteins at 30 µg per lane.

#### **Secondary**

All lanes: HRP-conjugated anti-rabbit lgG antibody

Predicted band size: 72 kDa

#### 7.5% SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wee1 antibody (ab137377)

Immunohistochemical analysis of paraffin embedded CL1-0 (Lung adenocarcinoma) xenograft tissue stained Wee1 using ab137377 at 1/100 dilution.

Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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