

Datasheet for ABIN968484
anti-NPAT antibody (AA 681-803)

4 Images

1 Publication

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Overview

Quantity:	50 µg
Target:	NPAT
Binding Specificity:	AA 681-803
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This NPAT antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human NPAT aa. 681-803
Clone:	27-NPAT
Isotype:	IgG2b
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	NPAT
Alternative Name:	NPAT (NPAT Products)
Background:	<p>Cyclins regulate transitions between cell cycle phases by acting as regulatory subunits of the cyclin-dependent kinases (cdk). The temporal expression of cyclins is tightly regulated and plays a critical role in controlling the enzymatic activity of the cdks. Cyclin-dependent kinase 2 (Cdk2) is a member of a family of cdc2-related cell cycle protein kinases. Cdk2 is expressed earlier in the cell cycle than cdc2 and forms complexes with cyclins A, E, D1, and D3. It is not known if the D cyclins can form active complexes with Cdk2. Cyclin E-Cdk2 kinase is active in the G1 and S phases of the cell cycle and is important, as is Cyclin A-Cdk2, for the progression from G1 to S phase. One substrate for cyclin E-Cdk2 is a Nuclear Protein mapped to the Ataxia Telangiectasia locus, NPAT. This protein associates with cyclin E-Cdk2 and can be phosphorylated by Cdk2. NPAT protein levels peak at the G1/S boundary and overexpression of NPAT accelerates S phase entry, especially after coexpression of cyclin E-Cdk2. Thus, NPAT is a substrate of cyclin E-Cdk2 that may mediate G1 to S phase transition.</p> <p>Synonyms: Nuclear Protein Ataxia Telangiectasia</p>
Molecular Weight:	210 kDa

Application Details

Comment:	Related Products: ABIN968537, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
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
Storage Comment:	Store undiluted at -20° C.

Publications

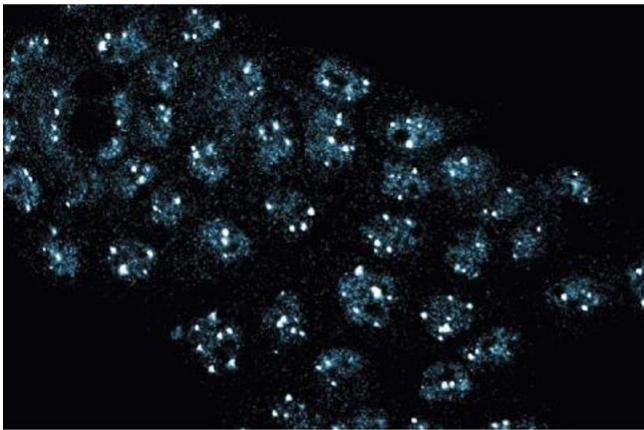
Product cited in: Zhao, Dynlacht, Imai, Hori, Harlow: "Expression of NPAT, a novel substrate of cyclin E-CDK2, promotes S-phase entry." in: **Genes & development**, Vol. 12, Issue 4, pp. 456-61, (1998) ([PubMed](#)).

Images



Western Blotting

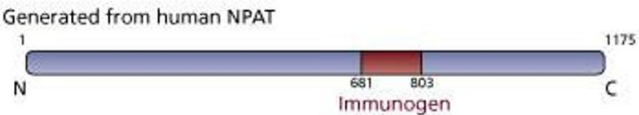
Image 1. Western blot analysis of NPAT on a Jurkat cell lysate (Human T-cell leukemia, ATCC TIB-152). Lane 1: 1:100, lane 2: 1:200, lane 3: 1:400 dilution of the mouse anti-human NPAT antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of A431 cells (Human epithelial carcinoma, ATCC CRL-1555).

Image 3.



Images

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN968484.