

Product datasheet

Anti-AKT2 (phospho S474) antibody ab38513

★★★★★ [6 Abreviews](#) [25 References](#) [4 Images](#)

Overview

Product name	Anti-AKT2 (phospho S474) antibody
Description	Rabbit polyclonal to AKT2 (phospho S474)
Host species	Rabbit
Specificity	Akt2 (phospho-Ser474) antibody detects endogenous levels of Akt2 only when phosphorylated at serine 474. The region of AKT2 surrounding S474 has a high degree of similarity to the corresponding regions in AKT1 and AKT3 and thus may cross react with these proteins if phosphorylated on the corresponding serine residue.
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human AKT2 aa 432-481 (C terminal) (phospho S474). The exact sequence is proprietary. The antiserum was produced against synthesized phosphopeptide derived from human Akt2 around the phosphorylation site of serine 474. Sequence: SEVDTRYFD DEFTAQSITI TPPDRYDSLGLLELDQRTHF PQFSYSASIR E

 [Run BLAST with](#)

 [Run BLAST with](#)

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: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.87% Sodium chloride, 49% PBS

	PBS without Mg ²⁺ and Ca ²⁺ .
Purity	Protein A purified
Purification notes	The antibody was affinity purified from rabbit antiserum by affinity chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Clonality	Polyclonal
Isotype	IgG

Applications

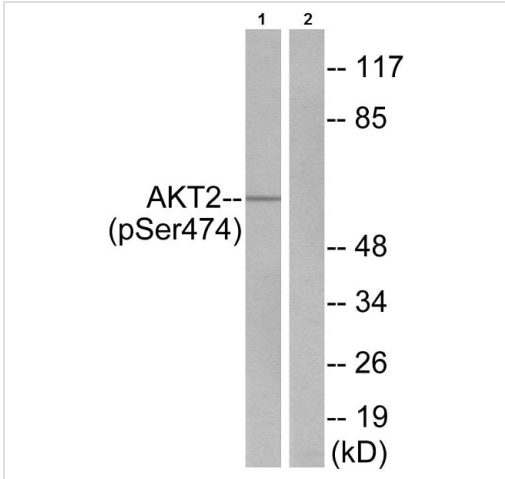
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab38513 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/500 - 1/1000. Predicted molecular weight: 55 kDa. Can be blocked with Recombinant human AKT2 protein (ab79798) .
IHC-P	★★★★★ (2)	1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function	General protein kinase capable of phosphorylating several known proteins.
Tissue specificity	Expressed in all human cell types so far analyzed.
Sequence similarities	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. RAC subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 PH domain. Contains 1 protein kinase domain.
Post-translational modifications	Phosphorylation on Thr-309 and Ser-474 is required for full activity. Ubiquitinated; undergoes both 'Lys-48'- and 'Lys-63'-linked polyubiquitination. TRAF6-induced 'Lys-63'-linked AKT2 ubiquitination. When fully phosphorylated and translocated into the nucleus, undergoes 'Lys-48'-polyubiquitination catalyzed by TTC3, leading to its degradation by the proteasome.

Images



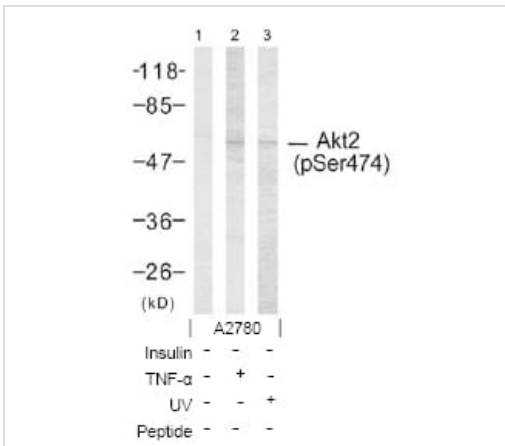
Western blot - Anti-AKT2 (phospho S474) antibody (ab38513)

All lanes : Anti-AKT2 (phospho S474) antibody (ab38513)

Lane 1 : 293 cells treated for 30 min with 200ng/ml EGF

Lane 2 : 293 cells treated for 30 min with 200ng/ml EGF with Phospho peptide

Predicted band size: 55 kDa



Western blot - Anti-AKT2 (phospho S474) antibody (ab38513)

All lanes : Anti-AKT2 (phospho S474) antibody (ab38513) at 1/500 dilution

Lane 1 : Extract of A2780 cells.

Lane 2 : Extract of A2780 cells + TNF alpha.

Lane 3 : Extract of A2780 cells + UV.

Lysates/proteins at 30 μ g per lane.

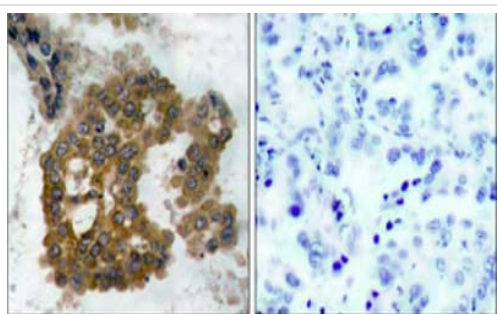
Secondary

All lanes : Alkaline Phosphatase AffiniPure Goat Anti-Rabbit IgG (H+L)

Predicted band size: 55 kDa

Observed band size: 60 kDa

Lanes can be loaded with 5-30 μ g of total protein.

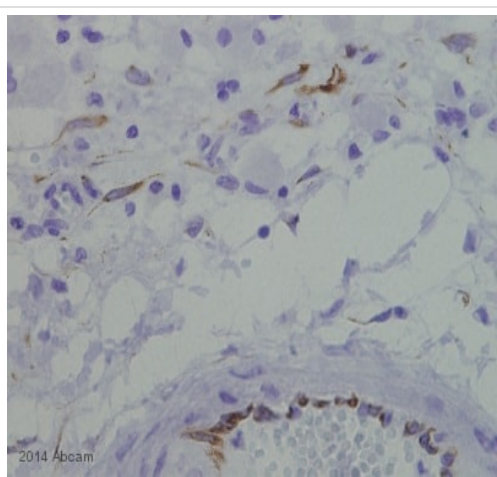


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT2 (phospho S474) antibody (ab38513)

This image shows human lung carcinoma tissue stained with **ab38513** at 1/50 dilution.

Image on left: untreated.

Image on right: treated with phosphopeptide at 1 µg/ml (negative control).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT2 (phospho S474) antibody (ab38513)

This image is courtesy of an anonymous Abreview

ab38513 staining AKT2 in human infantile fibromatosis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 1% FBS/BSA for 3 hours at room temperature; antigen retrieval was by heat mediation in Tris pH 9. Samples were incubated with primary antibody (1/150 in TBS + 1% BSA + 1% FBS) for 16 hours. An undiluted HRP-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.

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 <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors