

Product datasheet

Recombinant human AKT3 (mutated G171R) protein
ab177263

2 Images

Description

Product name	Recombinant human AKT3 (mutated G171R) protein
Biological activity	140 nmol/min/mg
Purity	> 95 % Densitometry. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	Q9Y243
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	85 kDa including tags
Amino acids	1 to 479
Modifications	mutated G171R
Tags	GST tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab177263** in the following tested applications.

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

Applications	SDS-PAGE Functional Studies Western blot
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.
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pH: 7.50

Constituents: 0.79% Tris HCl, 0.88% Sodium chloride, 0.31% Glutathione, 0.003% EDTA, 0.005% DTT, 0.002% PMSF, 25% Glycerol (glycerin, glycerine)

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function

IGF-1 leads to the activation of AKT3, which may play a role in regulating cell survival. Capable of phosphorylating several known proteins. Truncated isoform 2/PKB gamma 1 without the second serine phosphorylation site could still be stimulated but to a lesser extent.

Tissue specificity

In adult tissues, it is highly expressed in brain, lung and kidney, but weakly in heart, testis and liver. In fetal tissues, it is highly expressed in heart, liver and brain and not at all in kidney.

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.

Domain

Binding of the PH domain to the phosphatidylinositol 3-kinase alpha (PI(3)K) results in its targeting to the plasma membrane.

Post-translational modifications

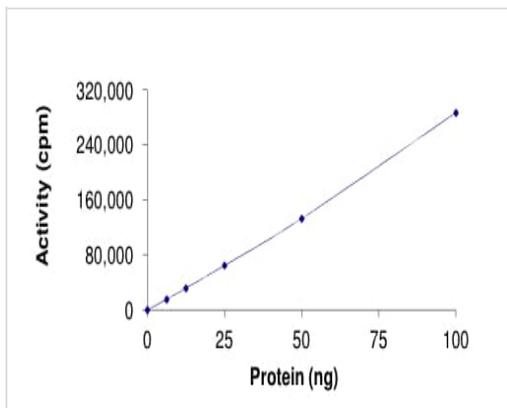
Phosphorylation on Thr-305 and Ser-472 is required for full activity (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR.

Ubiquitinated. When fully phosphorylated and translocated into the nucleus, undergoes 'Lys-48'-polyubiquitination catalyzed by TTC3, leading to its degradation by the proteasome.

Cellular localization

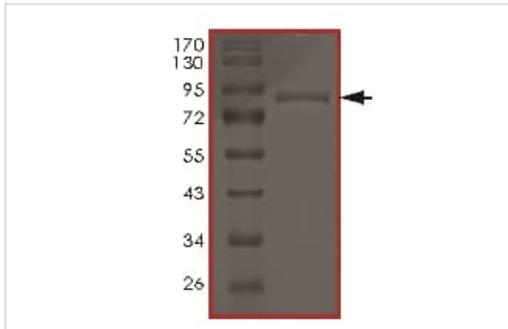
Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation.

Images



The specific activity of ab177263 was determined to be 140 nmol /min/mg.

Functional Studies - Recombinant human AKT3
(mutated G171R) protein (ab177263)



SDS-PAGE analysis of ab177263.

SDS-PAGE - Recombinant human AKT3 (mutated G171R) protein (ab177263)

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

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