Data Sheet (Cat.No.TMAC-00127)

Anti-Phospho-AKT1/3 (Tyr437/434) Polyclonal Antibody

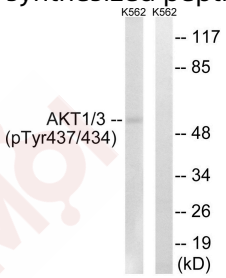
Product Details

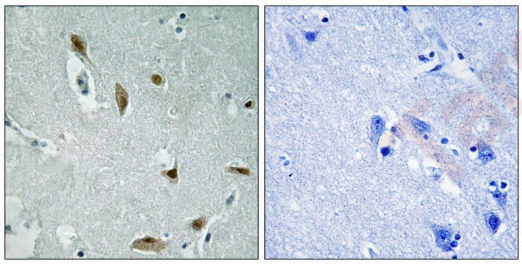
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Actual: 56 kDa.
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.

Applications

Verified Activity:

1. Western blot analysis of extracts from K562 cells, treated with insulin (0.01U/ml, 15mins), using AKT1/3 (Phospho-Tyr437/434) antibody TMAC-00127. The lane on the right is treated with the synthesized peptide.
2. Immunohistochemistry analysis of paraffin-embedded human brain tissue using AKT1/3 (Phospho-Tyr437/434) antibody TMAC-00127. The picture on the right is treated with the synthesized peptide.





Application:	IHC,WB
Recommended	WB: 1:500-3000; IHC: 1:50-100

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Peptide sequence around phosphorylation site of tyrosine 437 (T-R-Y(p)-F-D) derived from Human AKT1/3
Antigen Species:	human
Uniprot ID:	P31749 & Q9WUA6-1
Synonyms:	p-AKT1/3 (Y437/434);AKT1/3 (p-Y437/434);AKT1/3 (p-Tyr437/434);p-AKT1/3 (Tyr437/434)

Research Background

AKT1 is one of 3 closely related serine/threonine-protein kinases (AKT1, AKT2 and AKT3) called the AKT kinase, and which regulate many processes including metabolism, proliferation, cell survival, growth and angiogenesis. This is mediated through serine and/or threonine phosphorylation of a range of downstream substrates. Over 100 substrate candidates have been reported so far, but for most of them, no isoform specificity has been reported. AKT is responsible of the regulation of glucose uptake by mediating insulin-induced translocation of the SLC2A4/GLUT4 glucose transporter to the cell surface. Phosphorylation of PTPN1 at 'Ser-50' negatively modulates its phosphatase activity preventing dephosphorylation of the insulin receptor and the attenuation of insulin signaling.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481