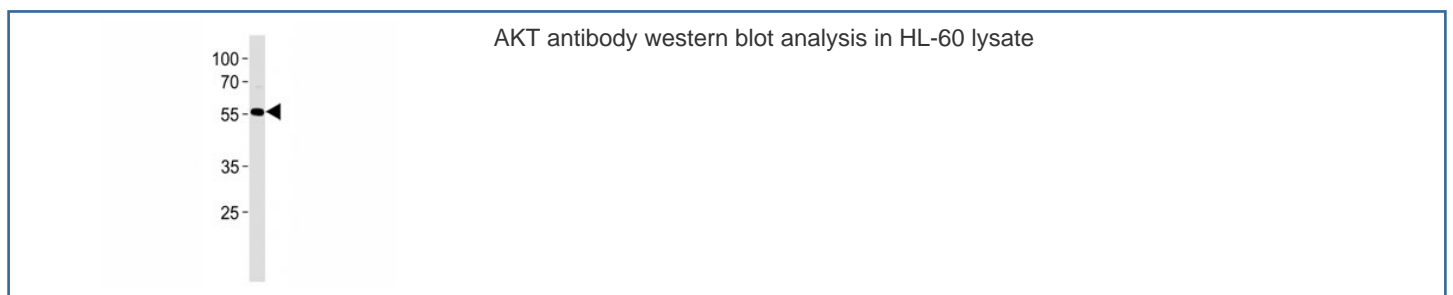


AKT Antibody [clone 960CT4.5.1] (F53789)

Catalog No.	Formulation	Size
F53789-0.1ML	In ascites with 0.09% sodium azide	0.1 ml

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Bovine
Format	Ascites
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	960CT4.5.1
Purity	Ascites
UniProt	P31749
Applications	Western Blot : 1:5000
Limitations	This AKT antibody is available for research use only.



Description

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.

AKT plays a role as key modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis, including correct neuron positioning, dendritic development and synapse formation. Signals downstream of phosphatidylinositol 3-kinase (PI(3)K) to mediate the effects of various growth factors such as platelet-derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I). AKT mediates the antiapoptotic effects of IGF-I.

For a microarray-validated AKT1 antibody supporting high-specificity detection, see our [AKT1 antibody \(clone AKT1/2552\)](#).

Application Notes

Titration of the AKT antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This AKT antibody was produced from mice immunized with a KLH conjugated synthetic peptide selected from the 430-460 region of human AKT1.

Storage

Aliquot the AKT antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.