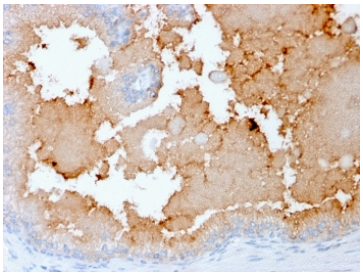
Recombinant AKT1 Antibody [clone rAKT1/2491] (V7745)

Catalog No.	Formulation	Size
V7745-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7745-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7745SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

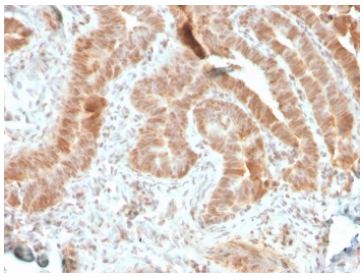
Recombinant MOUSE MONOCLONAL

Bulk quote request

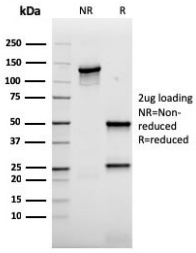
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rAKT1/2491
Purity	Protein G affinity chromatography
UniProt	P31749
Localization	Nucleus, plasma membrane, cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml Western blot: 1-2ug/ml
Limitations	This recombinant AKT1 antibody is available for research use only.



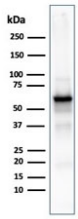
IHC staining of FFPE human prostate carcinoma with recombinant AKT1 antibody (clone rAKT1/2491). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



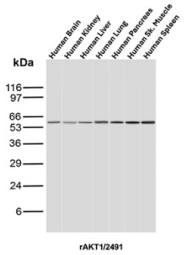
AKT1 Antibody Colon Carcinoma IHC. Immunohistochemistry staining of FFPE human colon carcinoma with recombinant AKT1 antibody (clone rAKT1/2491). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free recombinant AKT1 antibody (clone rAKT1/2491) as confirmation of integrity and purity.



Western blot testing of human MCF7 cell lysate with AKT1 antibody. Predicted molecular weight ~56 kDa.



AKT1 Antibody Human Tissue WB. Western blot analysis of human brain, kidney, liver, lung, pancreas, skeletal muscle, and spleen tissue lysates using AKT1 antibody (clone rAKT1/2491) detects a band at approximately 55-60 kDa, consistent with the predicted molecular weight of AKT1, with broad expression observed across tissues.

Description

The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKB tyrosine residues 740 and 751, which bind the subunit of the phosphatidylinositol 3-kinase (PI 3-kinase) complex. Activation of Akt1 by insulin or insulin-growth factor-1 (IGF-1) results in phosphorylation of both Thr 308 and Ser 473. Akt proteins become phosphorylated and activated in insulin/IGF-1-stimulated cells by an upstream kinase(s), and the activation of Akt1 and Akt2 is inhibited by the PI kinase inhibitor wortmannin.

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

Application Notes

Optimal dilution of the recombinant AKT1 antibody should be determined by the researcher.

Immunogen

Amino acids 85-189 from the human protein were used as the immunogen for the recombinant AKT1 antibody.

Storage

Store the recombinant AKT1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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