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Anti-pan AKT Rabbit mAb [19A03]

Catalog No.: A52005

Basic Information

Catalog No. (Cat.No.)	A52005
Host species	Rabbit
Reactivity	Human,Mouse,Rat,Goat,Chicken
Applications	WB,IHC,IP,IF,ELISA,ChIP,Cut&Tag
Synonyms	pan AKT,Akt-pan,PKBα,PKBβ,PKBγ (RAC-PK),PRKBA,PRKBB,PRKBG

Product Information

Target	pan AKT
Molecular Weight(Calculated)	55 kDa
Molecular Weight(Observed)	55 kDa
Isotype	IgG,Kappa
Conjugation	NA
Concentration	0.2 mg/ml
Clonality	Monoclonal
Clone No.	19A03
RRID	NA
Storage buffer	50% Glycerol, 0.05% BSA and 0.05% preservative in PBS (pH 7.2-7.4)
Storage	Stored at -20°C for 1 year. Avoid repeated freeze / thaw cycles.
Shipped at conditions	Frozen
Form	Liquid

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Product Usage Information

Application	Dilution
WB	1:2000-1:10000
IHC	1:200-1:1000
IP	1:50-1:200
IF	1:200-1:1000
ELISA	1:5000-1:20000

Target Information

Protein Name	RAC-alpha/beta/gamma serine/threonine-protein kinase
Gene Name	*AKT1,AKT2,AKT3*
Domain	NA
Background	Pan-AKT (pan-protein kinase B) is a core member of the serine/threonine protein kinase family, consisting of three highly homologous isoforms: Akt1, Akt2, and Akt3, which function as pivotal signaling hubs in cells. Akt1 is ubiquitously expressed in various tissues and regulates cell survival and proliferation; Akt2 is mainly responsible for glycolipid metabolic modulation; Akt3 is predominantly enriched in neural tissues and mediates cell development and differentiation. Targeting the conserved domains of all three isoforms, pan-Akt broadly recognizes total Akt proteins and transduces upstream PI3K signals to activate downstream cascades, governing multiple fundamental biological processes including cell proliferation, apoptosis, metabolism, autophagy, migration, and immune responses. Abnormal activation or overexpression of Akt family proteins drives tumor proliferation, metabolic disorders, inflammatory imbalance, and tissue fibrosis, rendering Akt a key hotspot target for tumor and metabolic disease research.