

Product name:	PIK3CA Mouse Monoclonal Antibody
Cat number:	MABN83003
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Mouse
Isotype:	Mouse IgG2a
Immunogen:	A synthetic peptide of human PI 3 Kinase catalytic subunit alpha
Reactivity:	Human, Mouse, Rat, Rabbit
Applications:	IHC 1:200-1:1000, ICC 1:200-1:1000, ELISA 1:5000-1:20000, FC 1:200-1:400
Molecular Weight:	124kDa
Purification:	Affinity Purification
Form:	Liquid
Buffer:	Purified antibody in PBS with 0.05% sodium azide.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.
Background:	PIK3CA is the most mutated gene in breast cancer and is important in other cancers. An integral part of the PI3K pathway, PIK3CA is an oncogene with two hotspots for activating mutations: the 542/545 region of the helical domain and the 1047 region of the kinase domain. The interaction of PIK3CA with the AKT and mTOR pathways is the subject of an immense amount of research and development, and PI3K inhibitors have exhibited some success in recent clinical trials. While PI3K monotherapies are likely insufficient, there is interest in pursuing PI3K inhibition in combination with other therapies including TKI's, MEK inhibitors, PARP inhibitors, and - in breast cancer - aromatase inhibitors.