

#3992 Store at -20C

Gα (pan) Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IHC-P	H M R Mk B	Endogenous	39, 41	Rabbit	#P19086, #P50148, #P29992	2781, 2776, 2767

Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:50
	Immunohistochemistry (Paraffin)	1:100
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
Specificity/Sensitivity	Gα (pan) Antibody detects total levels of endogenous G protein alpha subunits. The antibody may not detect G(12)-α, G(13)-α (13), G(s)-α (s) and G(olf)-α.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues of human guanine nucleotide-binding protein Gα (q) subunit. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Heterotrimeric guanine nucleotide-binding proteins (G proteins) consist of α, β and γ subunits and mediate the effects of hormones, neurotransmitters, chemokines, and sensory stimuli. To date, over 20 known Gα subunits have been classified into four families, Gα(s), Gα(i/o), Gα(q) and Gα(12), based on structural and functional similarities (1,2). Phosphorylation of Tyr356 of Gα(q)/Gα(11) is essential for activation of the G protein, since phenylalanine substitution for Tyr356 changes the interaction of Gα with receptors and abolishes ligand-induced IP ₃ formation (3).	
Background References	<ol style="list-style-type: none"> 1. Offermanns, S. (2001) <i>Oncogene</i> 20, 1635-42. 2. Pierce, K.L. et al. (2002) <i>Nat Rev Mol Cell Biol</i> 3, 639-50. 3. Umemori, H. et al. (1997) <i>Science</i> 276, 1878-81. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.
Applications Key	W: Western Blotting IP: Immunoprecipitation IHC-P: Immunohistochemistry (Paraffin)
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey B: Bovine
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