

#4705 Store at -20°C

Integrin $\alpha 5$ Antibody


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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M Mk	Endogenous	150	Rabbit	#P08648	3678

Product Usage Information	Application Western Blotting Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.
Specificity / Sensitivity	Integrin $\alpha 5$ Antibody detects endogenous levels of total integrin $\alpha 5$ protein.
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser458 of human integrin $\alpha 5$ protein. Antibodies are purified by protein A and peptide affinity chromatography.
Background	Integrins are α/β heterodimeric cell surface receptors that play a pivotal role in cell adhesion and migration, as well as in growth and survival (1,2). The integrin family contains at least 18 α and 8 β subunits that form 24 known integrins with distinct tissue distribution and overlapping ligand specificities (3). Integrins not only transmit signals to cells in response to the extracellular environment (outside-in signaling), but also sense intracellular cues to alter their interaction with the extracellular environment (inside-out signaling) (1,2). Integrin $\alpha 5/\beta 1$ is involved in multiple biological processes including embryonic development, angiogenesis and tumor metastasis (4,5). By interaction with its fibronectin ligand, $\alpha 5/\beta 1$ transduces signals that regulate cell adhesion, migration, matrix assembly and cytoskeletal organization (6).
Background References	1. Liu, S. et al. (2000) <i>J Cell Sci</i> 113 (Pt 20), 3563-71. 2. Hood, J.D. and Cheresch, D.A. (2002) <i>Nat Rev Cancer</i> 2, 91-100. 3. van der Flier, A. and Sonnenberg, A. (2001) <i>Cell Tissue Res</i> 305, 285-98. 4. Kabir-Salmani, M. et al. (2004) <i>Mol Hum Reprod</i> 10, 91-7. 5. Kim, S. et al. (2000) <i>J Biol Chem</i> 275, 33920-8. 6. Miyamoto, S. et al. (1995) <i>J Cell Biol</i> 131, 791-805.

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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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