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Anti-β-Dystroglycan (Tyr-892), Phosphospecific Antibody

Catalog # AN1751

Product Information

Application	WB
Primary Accession	Q14118
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M117
Calculated MW	97441

Additional Information

Gene ID	1605
Other Names	Dystroglycan 1 {ECO:0000312|HGNC:HGNC:2666}, Dystroglycan, Dystrophin-associated glycoprotein 1 {ECO:0000312|HGNC:HGNC:2666}, Alpha-dystroglycan, Alpha-DG, Beta-dystroglycan, Beta-DG, DAG1 (HGNC:2666)
Target/Specificity	Dystroglycans are essential elements of the neuromuscular junction (NMJ). The gene for dystroglycan is expressed as a precursor protein that is post-translationally cleaved into a 156 kDa extracellular peripheral membrane protein called α-dystroglycan and a 43 kDa transmembrane protein, β-Dystroglycan. The latter protein contains a PPxY motif that promotes binding to WW domain-containing proteins, such as utrophin and dystrophin. Phosphorylation at tyrosine 892 within the PPxY motif may regulate c-Src interactions with β-Dystroglycan, as well as inhibit interactions with WW domain proteins. In skeletal muscle, β-Dystroglycan is normally localized to the plasma membrane, however phosphorylation of Tyr-892 leads to localization of β-Dystroglycan to endosomal compartments along with c-Src. Thus, phosphorylation at Tyr-892 may have important roles in altering the localization of β-Dystroglycan during NMJ formation.
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-β-Dystroglycan (Tyr-892), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

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membrane protein called α-dystroglycan and a 43 kDa transmembrane protein, β-Dystroglycan. The latter protein contains a PPxY motif that promotes binding to WW domain-containing proteins, such as utrophin and dystrophin. Phosphorylation at tyrosine 892 within the PPxY motif may regulate c-Src interactions with β-Dystroglycan, as well as inhibit interactions with WW domain proteins. In skeletal muscle, β-Dystroglycan is normally localized to the plasma membrane, however phosphorylation of Tyr-892 leads to localization of β-Dystroglycan to endosomal compartments along with c-Src. Thus, phosphorylation at Tyr-892 may have important roles in altering the localization of β-Dystroglycan during NMJ formation.