

## DAG1

### Rabbit Anti-Human Dystroglycan Phospho-Tyr893 Clone Poly6171 pAb

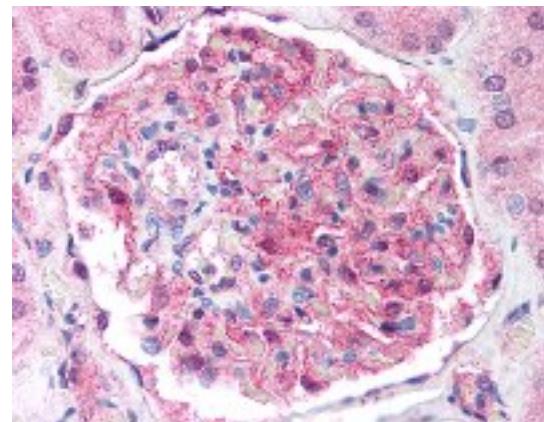
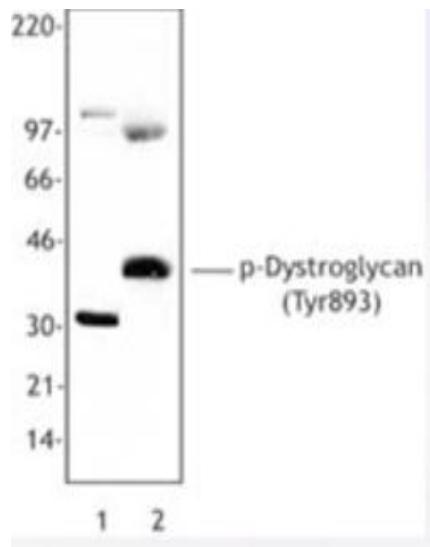
<b>Catalog No.</b>	CSI14268 CSI14269	<b>Quantity:</b>	50 µl 200 µl
<b>Alternate Names:</b>	156DAG, A3a, AGRNR, DAG, alpha-dystroglycan, beta-dystroglycan, dystroglycan 1, dystrophin-associated glycoprotein-1		
<b>Description:</b>	<p>Dystroglycan (also known as dystrophin-associated glycoprotein 1) is a member of the dystroglycan family that contains the WWW binding motif PPxY. This protein has <math>\alpha</math> and <math>\beta</math> subunits with approximate molecular weights of 156 kD and 43-50 kD, respectively. The dystroglycan <math>\beta</math> subunit is an integral membrane protein, the <math>\alpha</math> subunit is a ubiquitously expressed extracellular protein. Muscle and non-muscle isoforms differ by carbohydrate moieties (not protein sequence). Dystroglycan functions as an adhesion molecule responsible for interactions between extracellular matrix and the subsarcolemmal cytoskeleton. Dystroglycan binds to lamin in the matrix and dystrophin in the cytoskeleton; phosphorylation regulates the association of interacting proteins. Dystroglycan binds to utrophin when unphosphorylated; c-Src, Fyn, Csk, NCK, and SHC when phosphorylated. Dystroglycan interacts with dystrophin through the WW domain. The Poly6171 antibody recognizes human phosphorylated dystroglycan (Tyr893) and has been shown to be useful for Western blotting.</p>		
<b>Concentration:</b>	0.5 mg/ml		
<b>Gene ID:</b>	3875		
<b>Structure:</b>	Dystroglycan family, WWW binding motif PPxY, $\alpha$ , $\beta$ subunits 156 kD, 43-50 kD		
<b>Distribution:</b>	$\beta$ subunit integral membrane protein, $\alpha$ subunit extracellular; ubiquitously expressed. Muscle and non-muscle isoforms differ by carbohydrate moieties (not protein sequence)		
<b>Host:</b>	Rabbit		
<b>Immunogen:</b>	Modified peptide		
<b>Isotype:</b>	IgG		
<b>Clone:</b>	Poly6171		
<b>Function:</b>	Adhesion molecule responsible for interactions between extracellular matrix and subsarcolemmal cytoskeleton. Binds to lamin in the matrix and dystrophin in the cytoskeleton.		
<b>Formulation:</b>	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol. Precaution: Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.		



<b>Purification:</b>	The antibody was purified by antigen-affinity chromatography.
<b>Regulation:</b>	Phosphorylation regulates the association of interacting proteins.
<b>Reactivity:</b>	Human, reacts with Tyr893-phosphorylated dystroglycan
<b>Applications:</b>	WB, IHC
<b>Recommended Usage:</b>	Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10 $\mu$ l per 5 ml antibody dilution buffer for each mini-gel. For IHC, use a 1:50 dilution of antibody for staining. Antigen retrieval using 0.01 M sodium citrate buffer is recommended. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Storage &amp; Stability:</b>	Upon receipt, store frozen at -20° C
<b>Modification:</b>	Phosphorylation
<b>Interaction:</b>	Binds to utrophin when unphosphorylated, c-Src, Fyn, Csk, NCK, and SHC when phosphorylated. Binds to WW domain in dystrophin.

HeLa cells were treated with sodium butyrate for 16 hrs (lane 2) or were untreated (lane 1) and cell extracts prepared. Extracts were western blotted with Poly6171. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.

Formalin-fixed paraffin-embedded human kidney tissue was stained with Poly6171 and developed with an alkaline phosphatase chromogen substrate (red color). Tissue was counterstained with H&E (blue/pink). Magnification, 40X.



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