

30-1518: Anti-RLTPR / CARMIL2 Monoclonal Antibody (Clone:EM-53)

Clonality :	Monoclonal
Clone Name :	EM-53
Application :	FACS
Reactivity :	Human
Gene :	CARMIL2
Gene ID :	146206
Uniprot ID :	Q6F5E8
Format :	Purified
Alternative Name :	CARMIL2,LRRC16C,RLTPR
Isotype :	Mouse IgG1
Immunogen Information :	Murine Rltpr (amino acids 1147-1397)

Description

RLTPR / CARMIL2 (RGD motif, leucine rich repeats, tropomodulin domain and proline-rich containing; capping protein regulator and myosin 1 linker 2), also known as LRRC16C, is a cytosolic protein, which with high affinity binds CAPZA2 (capping protein muscle actin Z-line alpha 2) and decreases CAPZA2 affinity for actin barbed ends. RLTPR / CARMIL2 increases the rate of actin filament elongation from seeds in the presence of CAPZA2, however, seems unable to nucleate filaments. Its interaction with CAPZA2 is essential for lamellipodial protrusion and cell translocation. RLTPR / CARMIL2 is crucial for T cell costimulation via CD28 and this property seems to be independent on its actin-uncapping function. The lack of functional RLTPR / CARMIL2 molecules impeded the differentiation toward Th1 and Th17 fates of both human and murine CD4+ T cells and leads to combined immunodeficiency. Expression of RLTPR / CARMIL2 was also detected in human and murine B cells, but it seems not to be involved in BCR-mediated signaling.

Product Info

Amount :	0.1 mg
Purification :	Purified from hybridoma culture supernatant by protein-A affinity chromatography.
Storage condition :	Store at 2-8°C. Do not freeze.

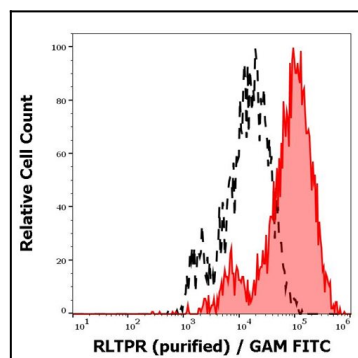


Figure 1: Separation of RLTPR transfected cells stained using anti-human RLTPR (EM-53) purified antibody (red-filled) from RLTPR transfected cells stained using mouse IgG1 isotype control (MOPC-21) purified antibody (black-dashed) in flow cytometry analysis (intracellular staining).