

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DOK7 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 651601
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DOK7 Ala179-Pro299 Accession # Q18PE1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

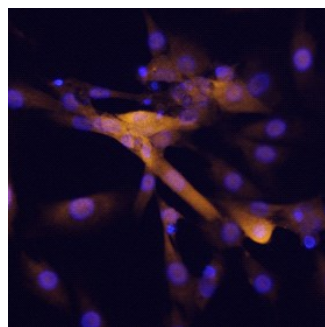
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



DOK7 in C2C12 Mouse Cell Line.
DOK7 was detected in immersion fixed C2C12 mouse myoblast cell line differentiated into myotubes using Mouse Anti-Human DOK7 Monoclonal Antibody (Catalog # MAB6398) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow, Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

DOK7 (Downstream of kinase 7) is a 55 kDa member of the DOK family of cytoplasmic adaptor proteins. It links the acetylcholine receptor and the receptor tyrosine kinase MuSK in skeletal and cardiac muscle. Mutations can cause familial myasthenic syndromes. The 504 amino acid (aa) human DOK7 contains pleckstrin homology (aa 7-109) and phosphotyrosine-binding (PTK, aa 125-236) and SH2 domains, and a C-terminal nuclear export signal. Splicing isoforms of 255, 608 and 366 aa diverge at aa 175 or 500, or have 40 divergent aa replacing aa 1-178, respectively. Within aa 179-299, human DOK7 shares 92% and 93% aa identity with mouse and rat DOK7, respectively.