

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat DOK7 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
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 either lyophilized or 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
Western Blot	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA

Western Blot

Detection of Human, Mouse, and Rat DOK7 by Western Blot.
Western blot shows lysates of untreated MCF-7 human breast cancer cell line and T47D human breast cancer cell line and C2C12 mouse myoblast cell line and L6 rat myoblast cell line untreated (-) or treated (+) with 2% horse serum for 6 days. PVDF Membrane was probed with 0.5 µg/mL of Goat Anti-Human/Mouse/Rat DOK7 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6398) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for DOK7 at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Simple Western

Detection of Human DOK7 by Simple Western™. Simple Western lane view shows lysates of MCF-7 human breast cancer cell line and T47D human breast cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for DOK7 at approximately 60 & 62 kDa (as indicated) using 5 µg/mL of Goat Anti-Human/Mouse/Rat DOK7 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6398) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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.