SANTA CRUZ BIOTECHNOLOGY, INC.

LGP2 (N-14): sc-164861



BACKGROUND

Helicases are enzymes that catalyze the separation of double stranded DNA or RNA by utilizing ATP. LGP2, also known as probable ATP-dependent RNA helicase DHX58, is a 678 amino acid protein belonging to the helicase family. LGP2 acts as a negative regulator of host innate immune defense against viruses by binding dsRNA produced during viral replication. The repressor domain of LGP2 binds to RIG-I, a signaling protein involved in host defenses against hepatitis C virus (HCV). By preventing RIG-I multimerization, LGP2 negatively regulates RIG-I-mediated signaling. Localized to the cytoplasm, LGP2 contains one helicase ATP-binding domain and one helicase C-terminal domain.

CHROMOSOMAL LOCATION

Genetic locus: DHX58 (human) mapping to 17q21.2; Dhx58 (mouse) mapping to 11 D.

SOURCE

LGP2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of LGP2 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-164861 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

LGP2 (N-14) is recommended for detection of LGP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LGP2 (N-14) is also recommended for detection of LGP2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LGP2 siRNA (h): sc-93967, LGP2 siRNA (m): sc-146718, LGP2 shRNA Plasmid (h): sc-93967-SH, LGP2 shRNA Plasmid (m): sc-146718-SH, LGP2 shRNA (h) Lentiviral Particles: sc-93967-V and LGP2 shRNA (m) Lentiviral Particles: sc-146718-V.

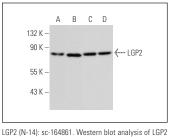
Molecular Weight of LGP2: 76 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or HEK293 whole cell lysate: sc-45136.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



expression in HeLa (**A**), MCF7 (**B**), HEK293 (**C**) and A549 (**D**) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try LGP2 (C-9): sc-373827 or LGP2 (E-1): sc-373826, our highly recommended monoclonal alternatives to LGP2 (N-14).