# HEATR3 (K-15): sc-243008



The Power to Question

# **BACKGROUND**

HEATR3 (HEAT repeat containing 3) is a 680 amino acid protein existing as three alternatively spliced isoforms and containing 2 HEAT (Huntingtin, elongation factor 3 (EF3), protein phosphatase 2A (PP2A) and the yeast Pl3-kinase Tor1) repeats. HEAT repeats form rod-like helical structures that are involved in intracellular transport. HEATR3 is encoded by a gene located on human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, a gastrointestinal inflammatory condition.

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: HEATR3 (human) mapping to 16q12.1.

# **SOURCE**

HEATR3 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HEATR3 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243008 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

HEATR3 (K-15) is recommended for detection of HEATR3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg 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); non cross-reactive with other HEATR family members.

HEATR3 (K-15) is also recommended for detection of HEATR3 in additional species, including canine.

Suitable for use as control antibody for HEATR3 siRNA (h): sc-93391, HEATR3 shRNA Plasmid (h): sc-93391-SH and HEATR3 shRNA (h) Lentiviral Particles: sc-93391-V.

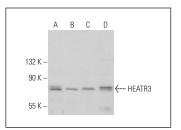
Molecular Weight of HEATR3: 75 kDa.

Positive controls: K-562 whole cell lysate: sc-2203, Hep G2 cell lysate: sc-2227 or A-431 whole cell lysate: sc-2201.

# **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



HEATR3 (K-15): sc-243008. Western blot analysis of HEATR3 expression in K-562 (**A**), Hep G2 (**B**), PANC-1 (**C**) and A-431 (**D**) whole cell lysates.

#### **STORAGE**

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

# **RESEARCH USE**

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

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