# OSGEPL1 (D-20): sc-248185



The Power to Question

#### **BACKGROUND**

OSGEPL1, also known as Qri7, is a 414 amino acid protein that belongs to the KAE1/YgjD family and exists as 3 alternatively spliced isoforms. In tRNAs that have codons beginning with adenine, OSGEPL1 is required for the formation of a threonylcarbamoyl group on adenosine. The gene that encodes OSGEPL1 contains about 16,568 bases and maps to human chromosome 2q32.2. Consisting of 237 million bases, chromosome 2 encodes over 1,400 genes and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome, is due to mutations in the ALMS1 gene.

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# CHROMOSOMAL LOCATION

Genetic locus: OSGEPL1 (human) mapping to 2q32.2; Osgepl1 (mouse) mapping to 1 C1.1.

#### **SOURCE**

OSGEPL1 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OSGEPL1 of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-248185 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

OSGEPL1 (D-20) is recommended for detection of OSGEPL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 OSGEP.

OSGEPL1 (D-20) is also recommended for detection of OSGEPL1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for OSGEPL1 siRNA (h): sc-94989, OSGEPL1 siRNA (m): sc-151332, OSGEPL1 shRNA Plasmid (h): sc-94989-SH, OSGEPL1 shRNA Plasmid (m): sc-151332-SH, OSGEPL1 shRNA (h) Lentiviral Particles: sc-94989-V and OSGEPL1 shRNA (m) Lentiviral Particles: sc-151332-V.

Molecular Weight of OSGEPL1 isoforms: 45/40/33 kDa.

# **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) 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.

#### **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.

# **PROTOCOLS**

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

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