

Sec61 γ (D-14): sc-138604

BACKGROUND

Sec61 γ is a subunit of the heteromeric Sec61 complex, which also contains α and β subunits. The Sec61 complex is the central component of the protein translocation apparatus of the endoplasmic reticulum (ER) membrane. Oligomers of the Sec61 complex form a transmembrane channel where proteins are translocated across and integrated into the ER membrane. The Sec61 complex distributes to both the ER and the ER-Golgi intermediate compartment, but not to the *trans*-Golgi network. Sec61 γ is a 68 amino acid single-pass membrane protein that belongs to the secE/Sec61 γ family. The Sec61 γ gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, fruit fly, *C.elegans*, *A.thaliana* and rice, and maps to human chromosome 7p11.2. Amplification of a defined chromosome segment on the short arm of chromosome 7 has frequently been reported in glioblastoma multiforme (GBM), where it is generally assumed that it is the result of over expression of the epidermal growth factor receptor (EGFR) gene that provides the selective pressure to maintain the amplification event.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SEC61G (human) mapping to 7p11.2; Sec61g (mouse) mapping to 11 A2.

SOURCE

Sec61 γ (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Sec61 γ of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-138604 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sec61 γ (D-14) is recommended for detection of Sec61 γ 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 other Sec61 family members.

Sec61 γ (D-14) is also recommended for detection of Sec61 γ in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Sec61 γ siRNA (h): sc-89786, Sec61 γ siRNA (m): sc-155965, Sec61 γ shRNA Plasmid (h): sc-89786-SH, Sec61 γ shRNA Plasmid (m): sc-155965-SH, Sec61 γ shRNA (h) Lentiviral Particles: sc-89786-V and Sec61 γ shRNA (m) Lentiviral Particles: sc-155965-V.

Molecular Weight of Sec61 γ : 8 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.