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Technical Data Sheet

For research use only

Not intended or approved for
diagnostic or therapeutic use.

Sphingosine Kinase 1, active

(Recombinant full-length human protein expressed in Sf9 cells)

Catalog # **E-K068**

Size: 20 µg

Product Description

Sphingosine kinase 1 (sphingosine kinase type 1 isoform, SphK1) is a lipid kinase. Recombinant full-length human sphingosine kinase 1 with N-terminal 6xHis tag was expressed in a baculovirus infected Sf9 insect cell expression system. The GenBank Accession number is AF200328. MW = 46.9 kDa.

Please refer to Certificate of Analysis (COA) for lot specific information about protein concentration, formulation, specific activity, and purity for a certain lot of sphingosine kinase 1 enzyme.

Suggested Assay Conditions

As positive control in Sphingosine Kinase Activity Assay Kit (cat# K-3500): 100 µM D-erythro-sphingosine substrate (part# K-4401), 10 µM ATP, and 0.01 - 0.02 Unit/mL of recombinant sphingosine kinase 1 enzyme in reaction buffer (part# K-3501) for 2 hours at room temperature.

Use in Sphingosine Kinase Inhibitor Screen Assay (cat# K-4400): 5 µM D-erythro-sphingosine substrate (part# K-4401), 5 µM ATP, and 0.02 Unit/mL of recombinant sphingosine kinase 1 enzyme in reaction buffer (part# K-4402) for 30 min at room temperature or 37 °C.

Storage and Stability

Store product frozen at or below -70 °C. Enzyme will be stable for at least 6 months at -70 °C as undiluted stock. Flash freeze in working aliquots to avoid multiple freeze/thaw cycles.

Application

Sphingosine kinase 1 is useful for the study of enzyme kinetics, inhibitor screening, and selectivity profiling.

References

1. Delon C. *et al.* (2004) *J. Biol. Chem.* **279** (43), 44763-44774
2. Taha TA. *et al.* (2005) *FASEB J.* Mar, **20** (3), 482-4
3. Pchejetski D. *et al.* (2005) *Cancer Res.* **65** (24), 11667-75