Endosidin-2 binds to the EXO70 subunit of the exocyst complex which results in inhibition of exocytosis and endosomal recycling in both plant and human cells and enhancement of plant vacuolar trafficking. EXO70 is a component of the octameric exocyst complex which tethers post-Golgi vesicles to the plasma membrane before SNARE-mediated membrane fusion\(^2\). Endosidin-2 was previously identified as a plant endomembrane trafficking disruptor\(^3\). Inhibits intracellular glucose transporter, GLUT4 trafficking to the membrane and impairs glucose uptake in response to insulin\(^4\). It is a valuable new tool for the study of exocytosis.

1) Zhang et al. (2016), *Endosidin2 targets conserved exocyst complex subunit EXO70 to inhibit exocytosis*; Proc. Natl. Acad. Sci. USA, **113** E41
2) Novick et al. (1980), *Identification of 23 complementation groups required for post-translational events in the yeast secretory pathway*; Cell, **21** 205
3) Drakakaki et al. (2011), *Clusters of bioactive compounds target dynamic endomembrane networks in vivo*; Proc. Natl. Acad. Sci. USA, **108** 17850

**PHYSICAL DATA**

- **Molecular Weight:** 414.17
- **Molecular Formula:** C\(_{15}\)H\(_{12}\)F NzO\(_3\)
- **Purity:** 98% by TLC
  - NMR: (Conforms)
- **Solubility:** DMSO (at least 40 mg/ml), DMF (up to 35 mg/ml) or Ethanol (up to 10 mg/ml)
- **Physical Description:** Off-white solid
- **Storage and Stability:** Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO, DMF, or ethanol may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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