Product Datasheet

ω-conotoxin SO-3

Product name: ω-conotoxin SO-3
Catalog #: 08CON013

Product description

ω-conotoxin SO-3 is a selective blocker of N-type voltage-sensitive calcium channels. EC50 for ω-conotoxin SO-3 is 0.16 μM (similar to ω-conotoxin MVIIA) on HVA calcium currents. ω-conotoxin SO-3 did not show any inhibiting effects on L-type, P/Q-type and R-type currents at 3 μM concentration. ω-conotoxin SO-3 has no effect on voltage-sensitive sodium currents, delayed rectifier potassium currents and transient outward potassium currents. At 3 μM, the inhibition amounts of HVA ICa was very similar between ω-conotoxin SO-3 and ω-conotoxin MVIIA (~ 32%). Their inhibitory effects are almost fully reversible but their half-time for recovery are different (~ 7.5 min for ω-conotoxin SO-3 and ~ 4.14 min for ω-conotoxin MVIIA). ω-conotoxin SO-3 displays an analgesic potency similar to ω-conotoxin MVIIA in a range of acute and chronic pain models in rodents, but has less adverse effects compared with identical dosages of ω-conotoxin MVIIA injected intrathecally.

Product specifications

- **AA sequence:** Cys1-Lys-Ala-Gly-Lys-Pro-Cys8-Ser-Arg-Ile-Tyr-Asn-Cys15-Thr-Gly-Ser-Cys20-Arg-Ser-Gly-Lys-Cys25-NH2
- **Disulfide bonds:** Cys1-Cys16, Cys8-Cys20 and Cys15-Cys25
- **Length (aa):** 25
- **Formula:** C100H165N35O32S6
- **Molecular Weight:** 2567.07 Da
- **Appearance:** White lyophilized solid
- **CAS number:**
- **Source:** Synthetic
- **Counterion:** TFA salts
- **Solubility:** Water or saline buffer, 5 mg/mL maximum (recommendation)

Formulation

- **Storage/Stability:** Shipped at ambient temperature under lyophilized powder. Store at -20°C (-4°F). Do not freeze-thaw. Aliquot sample if required and store at -80°C (-112°F).
- **Expiry date:** One year
- **Use restrictions:** For laboratory use only. Not for drug, household or other uses. Not for use in diagnostic or therapeutic procedures.

Related products

- **ω-conotoxin MVIIA - #08CON001:** blocks Ca2,2 channels
- **ω-conotoxin MVIIC - #08CON002:** blocks Ca2,1 and Ca2,2 channels
- **ω-agatoxin IVA - #11AGA001:** selective inhibitor of P/Q-type calcium channel (Ca2,1)
- **ω-conotoxin GVIA - #08CON003:** Ca2,2 inhibitor
- **SNX482 - #08SNX001:** selective inhibitor of R-type voltage-sensitive calcium channels

References


For laboratory research use only