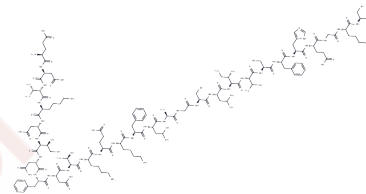


pICSA-BP

Chemical Properties

CAS No. :	2294870-89-4
Formula:	C142H221N35O44S2
Molecular Weight:	3186.61
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	pICSA-BP is a placental CSA-binding peptide that specifically binds to trophoblastic cells without interacting with other cell types in the placenta or with CSA-expressing cells in other tissues. It can direct nanoparticles to deliver payloads, such as Indocyanine green (ICG) and Methotrexate (MTX), for targeted placental drug delivery, highlighting its potential in placenta-specific drug delivery research.
Targets(IC50)	Others
In vivo	pICSA-BP (50 ng/mL) is co-localized with trophoblast cells in mouse placenta at E6.5, E8.5, E10.5, and E12.5, but it does not bind to the embryo, junctional zone, or decidua; similar effects are observed in human placenta. It specifically binds to placental CSA expressed in murine labyrinth and human syncytiotrophoblasts. When pICSA-BP (5 mg/kg, intravenously injected at E12.5 or E15.5) is conjugated to nanoparticles, it specifically delivers ICG to trophoblast cells in pregnant mice at stages E12.5 or E15.5. Additionally, pICSA-BP (5 mg/kg, intravenously injected every other day from E6.5 to E14.5) linked to nanoparticles efficiently targets MTX to placental cells, severely impairing placental and fetal development by targeting placental trophoblast cells.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.3138 mL	1.5691 mL	3.1381 mL
5 mM	0.0628 mL	0.3138 mL	0.6276 mL
10 mM	0.0314 mL	0.1569 mL	0.3138 mL
50 mM	0.0063 mL	0.0314 mL	0.0628 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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