# **Screening Libraries**

# **Product** Data Sheet

## Arg-Gly-Glu-Ser TFA

Cat. No.: HY-P0309A Molecular Formula:  $C_{18}H_{30}F_{3}N_{7}O_{10}$ 

Molecular Weight: 561.47

Sequence: Arg-Gly-Glu-Ser

Sequence Shortening: **RGES** Target: Others Pathway: Others

Storage: Sealed storage, away from moisture

> Powder -80°C 2 years -20°C 1 year

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

#### **SOLVENT & SOLUBILITY**

In Vitro

H<sub>2</sub>O: 20 mg/mL (35.62 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.7810 mL	8.9052 mL	17.8104 mL
	5 mM	0.3562 mL	1.7810 mL	3.5621 mL
	10 mM	0.1781 mL	0.8905 mL	1.7810 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS

Solubility: 100 mg/mL (178.10 mM); Clear solution; Need ultrasonic

## **BIOLOGICAL ACTIVITY**

Description

Arg-Gly-Glu-Ser TFA is a RGD-related peptide and a control for the RGDS ihibitory activity on fibrinogen binding to activated platelets.

In Vivo

Arg-Gly-Glu-Ser (5 mg/kg) in combination with LPS or saline + RGDS does not affect neutrophil and macrophage cell numbers and has no effect on protein accumulation compared with LPS- or saline-treated mice, respectively<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **PROTOCOL**

# Animal Administration [1]

Mice<sup>[1]</sup>

Mouse pharyngeal aspiration is performed in the assay. Animals are anesthetized with a mixture of ketamine and xylazine (45 mg/kg and 8 mg/kg, i.p., respectively). Test solution (30  $\mu$ L) containing LPS (1.5 mg/kg) is placed posterior in the throat and aspirated into the lungs. Control mice are administrated sterile saline (0.9% NaCl). Animals are administered with RGDS or Arg-Gly-Glu-Ser peptide (1, 2.5 or 5 mg/kg, i.p.) once one hour before LPS treatment and sacrificed 4 h post-LPS. Animals are also administered RGDS or Arg-Gly-Glu-Ser peptide (5 mg/kg, i.p.) once at different time points (1 h before or 2 h after LPS treatment) and sacrificed 24 h post-LPS. In addition, animals are administered with  $\alpha v\beta$ 3-blocking mAbs, anti- $\alpha v$ , or anti- $\beta v$ 3 (5 mg/kg, i.p.) once 1 h before and sacrificed 4 h post-LPS. Animals administered with these mAbs 2 h after LPS treatment are sacrificed 24 h post-LPS<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

[1]. Moon C, et al. Synthetic RGDS peptide attenuates lipopolysaccharide-induced pulmonary inflammation by inhibiting integrin signaled MAP kinase pathways. Respir Res. 2009 Mar 9:10:18.

Caution: Product has not been fully validated for medical applications. For research use only.

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