

TAT-Gap19 TFA

Cat. No.:	HY-P1136C	
Molecular Formula:	C ₁₂₁ H ₂₁₃ F ₃ N ₄₆ O ₂₈	
Molecular Weight:	2817.27	
Sequence Shortening:	YGRKKRRQRRRKQIEIKKFK	YGRKKRRQRRRKQIEIKKFK (TFA salt)
Target:	Gap Junction Protein	
Pathway:	Cytoskeleton	
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 ₂ O : 100 mg/mL (35.50 mM); Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	0.3550 mL	1.7748 mL	3.5495 mL
		5 mM	0.0710 mL	0.3550 mL	0.7099 mL
	10 mM	0.0355 mL	0.1775 mL	0.3550 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 (35.50 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	TAT-Gap19 TFA, a Cx mimetic peptide, is a specific connexin43 hemichannel (Cx43 HC) inhibitor. TAT-Gap19 TFA does not inhibit the corresponding Cx43 GJCs. TAT-Gap19 TFA traverses the blood-brain barrier and alleviates liver fibrosis in mice ^[1] ^[2] ^[3] .
In Vivo	A single injection of TAT-Gap19 TFA (i.v. via the tail vein; 55 mg/kg) produces significant immune signal in the brain 24 h later in 4 months old C57Bl6 male mice ^[1] . TAT-Gap19 TFA (1 mg/kg/day; an osmotic pump implanted in the peritoneal cavity; Two weeks) shows significantly decreased collagen deposition, as well as lowered amounts of α-SMA-positive cells area in mice subjected to treatment with 100-200 mg thioacetamide (TAA)/kg body weight for eight weeks ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Verónica Abudara, et al. The connexin43 mimetic peptide Gap19 inhibits hemichannels without altering gap junctional communication in astrocytes. *Front Cell Neurosci.* 2014 Oct 21;8:306.
- [2]. Sara Crespo Yanguas, et al. TAT-Gap19 and Carbenoxolone Alleviate Liver Fibrosis in Mice. *Int J Mol Sci.* 2018 Mar 12;19(3):817.
- [3]. Laura Walrave, et al. Inhibition of astroglial connexin43 hemichannels with TAT-Gap19 exerts anticonvulsant effects in rodents. *Glia.* 2018 Aug;66(8):1788-1804.
-

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA