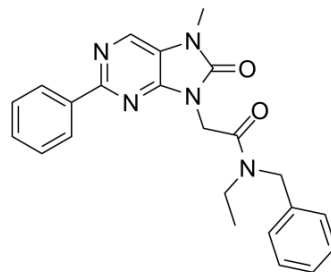


## Emapunil

Cat. No.:	HY-15527		
CAS No.:	226954-04-7		
Molecular Formula:	C <sub>23</sub> H <sub>23</sub> N <sub>5</sub> O <sub>2</sub>		
Molecular Weight:	401.46		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 33.33 mg/mL (83.02 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.4909 mL	12.4545 mL	24.9091 mL
	5 mM	0.4982 mL	2.4909 mL	4.9818 mL
	10 mM	0.2491 mL	1.2455 mL	2.4909 mL

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

#### In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**  
Solubility: ≥ 2.5 mg/mL (6.23 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**  
Solubility: ≥ 2.5 mg/mL (6.23 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Emapunil(AC-5216;XBD-173) is a translocator protein[TSPO (18 kDa)] ligand.IC50 value:Target: TSPO ligandXBD173 enhanced gamma-aminobutyric acid-mediated neurotransmission and counteracted induced panic attacks in rodents in the absence of sedation and tolerance development. XBD173 also exerted antipanic activity in humans and, in contrast to benzodiazepines, did not cause sedation or withdrawal symptoms [1]. The selective TSPO ligand, XBD173 (AC-5216, Emapunil), exerts anxiolytic effects not only in animal models, but also in human volunteers [2].

### CUSTOMER VALIDATION

- **Sci Rep.** 2016 Nov 25;6:37345.
- **Cancer Biomark.** 2016 Apr 1;17(1):11-6.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

- [1]. Costa B, et al. Translocator protein as a promising target for novel anxiolytics. *Curr Top Med Chem.* 2012;12(4):270-85.
  - [2]. Rupprecht R, et al. Translocator protein (18 kD) as target for anxiolytics without benzodiazepine-like side effects. *Science.* 2009 Jul 24;325(5939):490-3.
  - [3]. Qiu ZK, et al. The antidepressant-like activity of AC-5216, a ligand for 18KDa translocator protein (TSPO), in an animal model of diabetes mellitus. *Sci Rep.* 2016 Nov 25;6:37345.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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