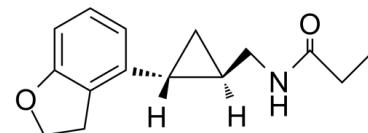


## Data Sheet

<b>Product Name:</b>	Tasimelteon
<b>Cat. No.:</b>	CS-5512
<b>CAS No.:</b>	609799-22-6
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>19</sub> NO <sub>2</sub>
<b>Molecular Weight:</b>	245.32
<b>Target:</b>	Melatonin Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Solubility:</b>	DMSO : ≥ 33 mg/mL (134.52 mM)



### BIOLOGICAL ACTIVITY:

Tasimelteon (BMS-214778) is an orally active and selective **dual melatonin receptor agonist (DMRA)**. Tasimelteon has 2.1-4.4 times greater affinity for the MT2 receptor than for the MT1 receptor. Tasimelteon is a circadian regulator and has the potential for Non-24-Hour Sleep-Wake Disorder (Non-24)<sup>[1][2]</sup>. **In Vitro:** Tasimelteon (BMS-214778) has 2.1-4.4 times greater affinity for the MT2 receptor believed to mediate circadian rhythm phase-shifting ( $K_i=0.0692$  nM and  $K_i=0.17$  nM in NIH-3T3 and CHO-K1 cells, respectively), than for the MT1 receptor ( $K_i=0.304$  nM and  $K_i=0.35$  nM, respectively). Tasimelteon has no appreciable affinity for more than 160 other pharmacologically relevant receptors and several enzymes<sup>[1]</sup>.

### References:

[1]. Christian Lavedan, et al. Tasimelteon: a selective and unique receptor binding profile. *Neuropharmacology*. 2015 Apr;91:142-7.

[2]. Keating GM, et al. Tasimelteon: A Review in Non-24-Hour Sleep-Wake Disorder in Totally Blind Individuals. *CNS Drugs*. 2016 Mar 22.

### CAIndexNames:

Propanamide, N-[[[(1R,2R)-2-(2,3-dihydro-4-benzofuran-1-yl)cyclopropyl]methyl]-

### SMILES:

[H][C@]1(C2=C3C(OCC3)=CC=C2)[C@@](CNC(CC)=O)([H])C1

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

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