

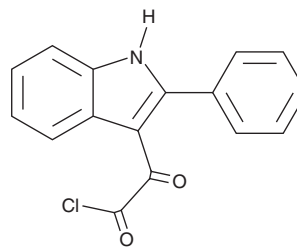
# PRODUCT INFORMATION



## TSPO Ligand-1

Item No. 45402

**CAS Registry No.:** 4560-08-1  
**Formal Name:**  $\alpha$ -oxo-2-phenyl-1H-indole-3-acetyl chloride  
**Synonym:** Translocator Protein Ligand-1  
**MF:** C<sub>16</sub>H<sub>10</sub>ClNO<sub>2</sub>  
**FW:** 283.7  
**Purity:**  $\geq 95\%$   
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

TSPO ligand-1 is supplied as a solid. A stock solution may be made by dissolving the TSPO ligand-1 in the solvent of choice, which should be purged with an inert gas. TSPO ligand-1 is soluble ( $\geq 10$  mg/ml) in ethanol and DMSO.

### Description

TSPO ligand-1 is an intermediate in the synthesis of 2-phenylindolglyoxylamide derivatives that bind translocator protein, formerly known as translocator protein (18 kDa) (TSPO).<sup>1</sup> It has been used in the synthesis of fluorescent probes that are selective for translocator protein.<sup>2</sup> TSPO ligand-1 has also been used in the synthesis of autophagy-targeting chimeras (AUTACs), bifunctional molecules that contain an autophagy degradation tag and a specific target-binding molecule, that increase mitophagy and reduce apoptosis.<sup>3</sup>

### References

1. Primofiore, G., Da Settimo, F., Taliani, S., *et al.* *N,N*-dialkyl-2-phenylindol-3-ylglyoxylamides. A new class of potent and selective ligands at the peripheral benzodiazepine receptor. *J. Med. Chem.* **47**(7), 1852-1855 (2004).
2. Taliani, S., Simorini, F., Sergianni, V., *et al.* New fluorescent 2-phenylindolglyoxylamide derivatives as probes targeting the peripheral-type benzodiazepine receptor: Design, synthesis, and biological evaluation. *J. Med. Chem.* **50**(2), 404-407 (2007).
3. Takahashi, D., Moriyama, J., Nakamura, T., *et al.* AUTACs: Cargo-specific degraders using selective autophagy. *Mol. Cell* **76**(5), 797-810 (2019).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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