

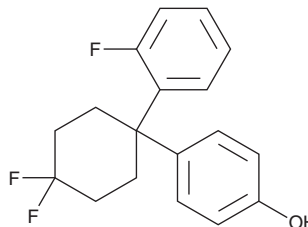
# PRODUCT INFORMATION



## AC-186

Item No. 33526

**CAS Registry No.:** 1421854-16-1  
**Formal Name:** 4-[4,4-difluoro-1-(2-fluorophenyl)cyclohexyl]-phenol  
**MF:** C<sub>18</sub>H<sub>17</sub>F<sub>3</sub>O  
**FW:** 306.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 230 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

AC-186 is supplied as a solid. A stock solution may be made by dissolving the AC-186 in the solvent of choice, which should be purged with an inert gas. AC-186 is soluble in organic solvents such as ethanol and DMSO.

### Description

AC-186 is a non-steroidal estrogen receptor β (ERβ) agonist (EC<sub>50</sub> = 6 nM in a functional assay).<sup>1</sup> It is selective for ERβ over ERα (EC<sub>50</sub> = 5,000 nM). AC-186 (10 mg/kg) reduces dopaminergic neuronal loss in the substantia nigra, improves novel object recognition, and improves motor performance in male, but not female, rats in a model of Parkinson's disease induced by 6-OHDA (Item No. 25330). It reduces tactile allodynia in male, but not female or female ovariectomized, rats in a model of spinal nerve ligation-induced neuropathic pain.<sup>2</sup> AC-186 (10 and 30 mg/kg) also reduces tactile allodynia in male rats in a model of neuropathic pain induced by paclitaxel (Item No. 10461).

### References

1. McFarland, K., Price, D.L., Davis, C.N., *et al.* AC-186, a selective nonsteroidal estrogen receptor β agonist, shows gender specific neuroprotection in a Parkinson's disease rat model. *ACS Chem. Neurosci.* **4(9)**, 1249-1255 (2013).
2. Ma, J.-N., McFarland, K., Olsson, R., *et al.* Estrogen receptor beta selective agonists as agents to treat chemotherapeutic-induced neuropathic pain. *ACS Chem. Neurosci.* **7(9)**, 1180-1187 (2016).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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