

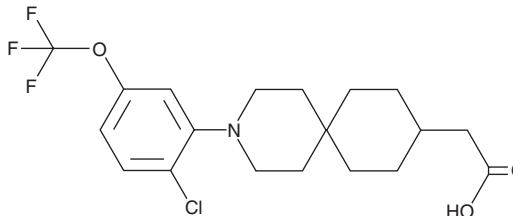
# PRODUCT INFORMATION



## GPR120 Compound A

Item No. 16624

**CAS Registry No.:** 1599477-75-4  
**Formal Name:** 3-[2-chloro-5-(trifluoromethoxy)phenyl]-3-azaspiro[5.5]undecane-9-acetic acid  
**Synonym:** GPR120 cpdA  
**MF:** C<sub>19</sub>H<sub>23</sub>ClF<sub>3</sub>NO<sub>3</sub>  
**FW:** 405.8  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 213, 260 nm  
**Supplied as:** A crystalline 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

GPR120 Compound A is supplied as a crystalline solid. A stock solution may be made by dissolving the GPR120 Compound A in the solvent of choice, which should be purged with an inert gas. GPR120 Compound A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of GPR120 Compound A in these solvents is approximately 30 mg/ml.

GPR120 Compound A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GPR120 Compound A should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. GPR120 Compound A has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

GPR120 (free fatty acid receptor 4/FFAR4) is a G protein-coupled receptor expressed in intestine, adipocytes, and pro-inflammatory macrophages that is activated by long chain FFAs. It has been linked to the ability of FAs to produce anti-inflammatory effects and to acutely potentiate insulin secretion. GPR120 compound A is an orally available, high-affinity agonist of GPR120 (EC<sub>50</sub> = ~0.35 μM) that demonstrates potent selectivity over another lipid-sensing G-protein, GPR40 (FFAR1).<sup>1</sup> This compound exerts anti-inflammatory effects on macrophages *in vitro* and improves glucose tolerance, decreases hyperinsulinemia, increases insulin sensitivity, and decreases hepatic steatosis when included at 30 mg/kg body weight in a high-fat diet fed to obese mice.<sup>1</sup>

### Reference

1. Oh da, Y., Walenta, E., Akiyama, T.E., *et al.* A Gpr120-selective agonist improves insulin resistance and chronic inflammation in obese mice. *Nat. Med.* **20(8)**, 942-947 (2014).

#### 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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