

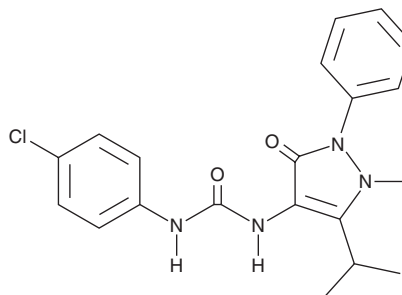
# PRODUCT INFORMATION



## TC-FPR 43

Item No. 29804

**CAS Registry No.:** 903895-98-7  
**Formal Name:** N-(4-chlorophenyl)-N'-[2,3-dihydro-1-methyl-5-(1-methylethyl)-3-oxo-2-phenyl-1H-pyrazol-4-yl]-urea  
**Synonym:** FPR Agonist 43  
**MF:** C<sub>20</sub>H<sub>21</sub>ClN<sub>4</sub>O<sub>2</sub>  
**FW:** 384.9  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 247 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

TC-FPR 43 is supplied as a crystalline solid. A stock solution may be made by dissolving the TC-FPR 43 in the solvent of choice, which should be purged with an inert gas. TC-FPR 43 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of TC-FPR 43 in these solvents is approximately 1 and 5 mg/ml, respectively.

TC-FPR 43 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TC-FPR 43 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. TC-FPR 43 has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

TC-FPR 43 is an agonist of formyl peptide receptor 1 (FPR1) and FPR2, which was previously known as formyl peptide receptor-like 1 (FPRL1).<sup>1,2</sup> TC-FPR 43 induces calcium flux in CHO cells expressing human FPR2, G<sub>α15</sub>, and aequorin (EC<sub>50</sub> = 0.044 μM) and in CHO-K1 cells expressing either human FPR1, human FPR2, mouse Fpr1, or mouse Fpr2, G<sub>α16</sub>, and aequorin in a concentration-dependent manner.<sup>2</sup> TC-FPR 43 inhibits migration of polymorphonuclear (PMN) neutrophils induced by fMLP (Item No. 21495) or IL-8 with IC<sub>50</sub> values of 0.64 and 0.24 μM, respectively.<sup>1</sup> It also reduces ear swelling induced by prostaglandin E<sub>2</sub> (PGE<sub>2</sub>; Item No. 14010) and leukotriene B<sub>4</sub> (LTB<sub>4</sub>; Item No. 20110) in mice when administered at a dose of 50 mg/kg.

### References

- Bürli, R.W., Xu, H., Zou, X., *et al.* Potent hFPRL1 (ALXR) agonists as potential anti-inflammatory agents. *Bioorg. Med. Chem. Lett.* **16(14)**, 3713-3718 (2006).
- Sogawa, Y., Shimizugawa, A., Ohyama, T., *et al.* The pyrazolone originally reported to be a formyl peptide receptor (FPR) 2/ALX-selective agonist is instead an FPR1 and FPR2/ALX dual agonist. *J. Pharmacol. Sci.* **111(3)**, 317-321 (2009).

#### 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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