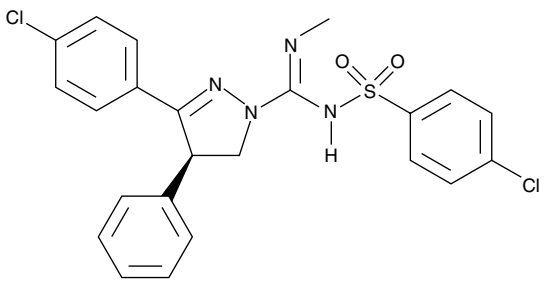
# Product Information

## (R)-SLV 319

*Item No. 10009227*

**CAS Registry No.:** 656827-86-0
**Formal Name:** 3-(4-chlorophenyl)-N-[(4-chlorophenyl)sulfonyl]-4,5-dihydro-N'-methyl-4-phenyl-1H-pyrazole-1-carboximidamide
**MF:** $C_{23}H_{20}Cl_2N_4O_2S$
**FW:** 487.4
**Purity:** ≥98%
**Stability:** ≥2 year at -20°C
**Supplied as:** A crystalline solid
**UV/Vis.:** $\lambda_{max}$: 228, 314 nm




### Laboratory Procedures

For long term storage, we suggest that (R)-SLV 319 be stored as supplied at -20°C. It will be stable for at least two years.

(R)-SLV 319 is supplied as a crystalline solid. A stock solution may be made by dissolving the (R)-SLV 319 in an organic solvent purged with an inert gas. (R)-SLV 319 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of (R)-SLV 319 in these solvents is approximately 30 mg/ml.

(R)-SLV 319 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (R)-SLV 319 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. (R)-SLV 319 has a solubility of approximately 0.25 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method.We do not recommend storing the aqueous solution for more than one day.

Central cannabinoid ($CB_1$) receptor antagonists may have potential in the treatment of a number of diseases such as neuroinflammatory disorders, cognitive disorders, septic shock, obesity, psychosis, addiction, and gastrointestinal disorders.[1] (R)-SLV 319 is the inactive enantiomer of SLV 319 with 100-fold less affinity for the $CB_1$ receptor. SLV 319 is a potent and selective $CB_1$ receptor antagonist with $K_i$ values of 7.8 and 7,943 nM for $CB_1$ and peripheral cannabinoid ($CB_2$) receptors, respectively.[1] SLV 319 is less lipophilic (log *P* = 5.1) and therefore more water soluble than other known $CB_1$ receptor ligands.[2]

### References


1. Lange, J.H.M., Coolen, H.K.A.C., van Stuivenberg, H.H., *et al.* Synthesis, biological properties, and molecular modeling investigations of novel 3,4-diarylpyrazolines as potent and selective $CB_1$ cannabinoid receptor antagonists. *J. Med. Chem.* **47(3)**, 627-643 (2004).
2. Lange, J.H.M., van Stuivenberg, H.H., Veerman, W., *et al.* Novel 3,4-diarylpyrazolines as potent cannabinoid $CB_1$ receptor antagonists with lower lipophilicity. *Biooganic & Medicinal Chemistry Letters* **15**, 4794-4798 (2005).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