

## Catalog # 10-3998

## **Thiothixene**

CAS# 3313-26-6

((Z)-N,N-Dimethyl-9-[3-(4-methyl-1-iperazinyl)propylidene]thioxanthene-2-sulfonamide Lot # FBS4064

Thiothixene is a clinically useful typical antipsychotic.<sup>1</sup> It acts as an antagonist at multiple receptors including dopamine  $D_2$  and  $D_3$  (sub-nanomolar), histamine  $H_1$ , serotonin 5-HT<sub>7</sub>, and  $\alpha_{1/2}$ -adrenergic. Thiothixene stimulates efferocytosis, the phagocytic removal of apoptotic cells by macrophages, *via* increased expression of the retinol-binding protein receptor Stra6L leading to arginase 1 production.<sup>2</sup> A potential new use for an old drug to facilitate the removal of diseased tissue.

- 1) Wyatt and Grady. (1990), Thiothixene in Analytical Profiles of Drug Substances; Vol.18 Academic Press 527
- 2) Kojima et al. (2025), The antipsychotic drug thiothixene stimulates macrophages to clear pathogenic cells by inducing arginase 1 and continual efferocytosis; Sci. Signal. **18** eads6584

## **PHYSICAL DATA**

Molecular Weight: 443.62

Molecular Formula:  $C_{23}H_{29}N_3O_2S_2$ Purity: >98% by HPLC

NMR: (Conforms)

Solubility: DMSO (20 mg/ml with warming)

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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