



Product Information

Product ID C1644
CAS No. 169590-42-5
Chemical Name 4-[5-(4-Methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl] benzenesulfonamide

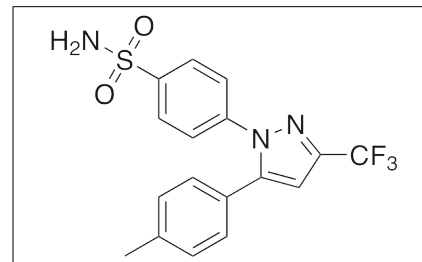
Synonym SC-58635, Celebrex

Formula C₁₇H₁₄F₃N₃O₂S
Formula Wt. 381.37
Melting Point 157-159 °C
Purity ≥99%
Solubility Insoluble in water. Soluble in DMSO (200 mg/mL), ethanol (100 mg/mL).

Store Temp Ambient

Ship Temp Ambient

Description Celecoxib is a non-steroidal anti-inflammatory drug (NSAID) that inhibits COX-2; it exhibits anti-inflammatory, analgesic, anticancer, and anti-metastatic activities. Celecoxib is clinically used to treat arthritis, acute pain, and ankylosing spondylitis. In hepatoma cells, celecoxib decreases the mitochondrial membrane potential, increases cytochrome c release, activates caspases 3 and 9, alters Bcl-2 and Bax levels, and induces apoptosis. In vitro, celecoxib inhibits release of IL-6, IL-1B, and MIP-1α, suppresses phosphorylation of JNK, and activates SIRT1. Additionally, this compound inhibits invasion and migration of nasopharyngeal carcinoma cells by decreasing activity of matrix metalloproteinases 2 and 9 (MMP2/9).



Bulk quantities available upon request

Product ID	Size
C1644	100 mg
C1644	500 mg
C1644	1 g

References Shao D, Kan M, Qiao P, et al. Celecoxib induces apoptosis via a mitochondria dependent pathway in the H22 mouse hepatoma cell line. *Mol Med Rep.* 2014 Oct;10(4):2093-8. PMID: 25109418.

Annamanedi M, Kalle AM. Celecoxib sensitizes Staphylococcus aureus to antibiotics in macrophages by modulating SIRT1. *PLoS One.* 2014 Jun 20;9(6):e99285. PMID: 24950067.

Li WW, Long GX, Liu DB, et al. Cyclooxygenase-2 inhibitor celecoxib suppresses invasion and migration of nasopharyngeal carcinoma cell lines through a decrease in matrix metalloproteinase-2 and -9 activity. *Pharmazie.* 2014 Feb;69(2):132-7. PMID: 24640603.

Shi S, Klotz U. Clinical use and pharmacological properties of selective COX-2 inhibitors. *Eur J Clin Pharmacol.* 2008 Mar;64(3):233-52. PMID: 17999057.

Subbaramaiah K, Howe LR, Bhardwaj P, et al. Obesity is associated with inflammation and elevated aromatase expression in the mouse mammary gland. *Cancer Prev Res (Phila).* 2011 Mar;4(3):329-346. PMID: 21372033.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.