# SB-431542, GMP Grade

**Cat. No.** SB-431542-11 **Lot. No.** (See product label)

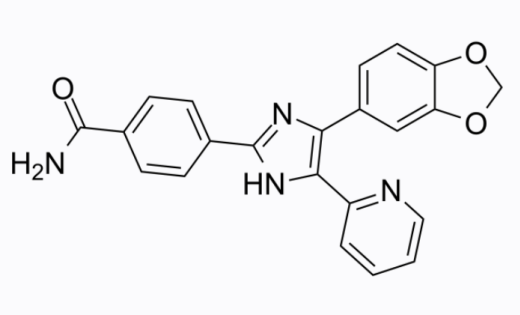
## SPECIFICATION

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| **Product Overview** | SB-431542 (GMP) is SB-431542 produced by using GMP guidelines. GMP small molecules works appropriately as an auxiliary reagent for cell therapy manufacture. |
| **Description** | SB-431542 is a TGF-β receptor kinase inhibitor (TRKI) in SMAD signaling. |
| **Form** | Solid, White to off-white |
| **Target** | TGF-β Receptor |
| **In Vitro** | SB-431542 (GMP) (10 μM; 10 days) induces human pluripotent stem cells (hPSCs) to post-mitotic cortical neurons differentiation. SB-431542 (GMP) (10 μM) facilitates directed differentiation into midbrain dopamine neurons (mDA). SB-431542 (GMP) (3.8 μM) promotes differentiation of hPSCs to multipotent hematopoietic progenitors that arise from SOX17+ hemogenic endothelium in vitro. RT-PCR Cell Line: Human pluripotent stem cells (hPSCs) Concentration: 10 μM Incubation Time: 10 days Result: Showed downregulation of the pluripotency marker OCT4 and induction of neural and neuronal markers PAX6, FOXG1 and DCX, as well as markers of early born cortical neurons, including TBR1 (preplate, subplate and layer VI) and REELIN, in LSB+X/P/S/D conditions. |
| **IC50 & Target** | ALK4: 1 μM (IC50) ALK5: 0.75 μM (IC50) ALK7: 2 μM (IC50) |
| **CAS** | 301836-41-9 |

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| **Formula** | C22H16N4O3 |
| **Molecular Mass** | 384.39 |

## GENE INFORMATION

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|---|---|
| **Pathway** | TGF-beta/Smad |
| **Synonyms** | SB-431542 |
| **Chemical Structure** |  |

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