# Product Specification Sheet

<table>
<thead>
<tr>
<th><strong>Product Name:</strong></th>
<th>BMS-354825 (Dasatinib)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Catalog Number:</strong></td>
<td>C2354</td>
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</tbody>
</table>

## Technical Information:
- **Chemical Formula:** $\text{C}_{22}\text{H}_{26}\text{ClN}_{7}\text{O}_{2}\text{S}$
- **CAS #:** 302962-49-8, 863127-77-9
- **Molecular Weight:** 488.01
- **Purity:** > 99%
- **Appearance:** White Crystalline solid
- **Solubility:** Soluble in DMSO up to 100 mM
- **Chemical Name:** N-(2-chloro-6-methylphenyl)-2-(6-[4-(2-hydroxyethyl)piperazin-1-yl]-2-methylpyrimidin-4-ylamino)thiazole-5-carboxamide
- **Storage:** Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
- **Shelf Life:** In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

## Handling:
- To make 10 mM stock solution, add 0.205mL of DMSO for each mg of BMS-354825 (Dasatinib)
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

## Biological Activity:
Dasatinib is an orally-available, aminothiazole-based inhibitor of Abl and Src at IC50 values of 0.6 and 8 nm, respectively. [1] Dasatinib has been shown to be >300-fold more potent than imatinib in cells expressing wild-type Bcr-Abl and in a number of imatinib-resistant mutants at IC50s < 1.7 nM. [2] With the exception of T315I, Dasatinib inhibited cell proliferation of mutants in the range of 0.8 to 11 nM.

Dasatinib’s activity against Lck allows for inhibition of T-cell receptor-mediated signal transduction, cellular proliferation, cytokine production, and in vivo T-cell responses. Combination of dasatinib with other immunomodulators such as cyclosporine A or rapamycin results in a synergistic inhibition of T-cell activation. [3]

## Reference:

## To reorder:

For Technical Support: [technical@cellagentechn.com](mailto:technical@cellagentechn.com)

**Chemicals are sold for research use only, not for clinical or diagnostic use.**