Product Name: Imatinib mesylate
Catalog No.: 5906
Batch No.: 2

CAS Number: 220127-57-1
IUPAC Name: 4-[(4-Methyl-1-piperazinyl)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]benzamide methanesulfonate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{29}H_{31}N_{7}O.CH_{4}O_{3}S.\frac{1}{4}H_{2}O
Batch Molecular Weight: 594.21
Physical Appearance: White solid
Solubility: water to 100 mM
DMSO to 100 mM
Storage: Store at +4°C

2. ANALYTICAL DATA

HPLC: Shows 99.6% purity
1H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>60.64</td>
<td>60.62</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>6.02</td>
<td>5.97</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>16.5</td>
<td>16.46</td>
</tr>
</tbody>
</table>
Product Name: Imatinib mesylate
Catalog No.: 5906
Batch No.: 2
CAS Number: 220127-57-1
IUPAC Name: 4-[(4-Methyl-1-piperazinyl)methyl]-N-[4-methyl-3-[[4-(3-pyridinyl)-2-pyrimidinyl]amino]phenyl]benzamide methanesulfonate

Description:
Potent and selective v-Abl tyrosine kinase inhibitor (IC₅₀ = 38 nM). Also inhibits PDGFR and c-kit. Exhibits selectivity for v-Abl over a panel of other tyrosine and serine/threonine protein kinases. Selectively inhibits PDGF-stimulated growth of v-abl-transformed PB-3 cells and v-sis-transformed BALB/c 3T3 cells in vitro. Exhibits antitumor effects in mice bearing AMuLV or BABL/c 3T3 v-sis cells.

Physical and Chemical Properties:
Batch Molecular Formula: C₇₉H₆₅N₁₁O₆,CH₃O,S,¼H₂O
Batch Molecular Weight: 594.21
Physical Appearance: White solid
Minimum Purity: >98%

Storage: Store at +4°C

Solubility & Usage Info:
water to 100 mM
DMSO to 100 mM

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References: