Raf kinases are a family of three serine/threonine-specific protein kinases that are related to retroviral oncogenes. RAF is an acronym for Rapidly Accelerated Fibrosarcoma. Raf kinases participate in the RAS-RAF-MEK-ERK signal transduction cascade, also referred to as the mitogen-activated protein kinase (MAPK) cascade. Activation of RAF kinases requires interaction with RAS-GTPases. The three RAF kinase family members are: A-Raf, B-Raf, C-Raf (Raf-1). The B-Raf protein is involved in sending signals inside cells, which are involved in directing cell growth. It was shown to be faulty (mutated) in some human cancers. C-RAF or even Raf-1 is an enzyme that in humans is encoded by the RAF1 gene. The c-Raf protein is part of the ERK1/2 pathway as a MAP kinase kinase kinase (MAP3K) that functions downstream of the Ras subfamily of membrane associated GTPases. C-Raf is a member of the Raf kinase family of serine/threonine-specific protein kinases, from the TKL (Tyrosine-kinase-like) group of kinases.
## Raf Inhibitors & Modulators

### AD80
**Cat. No.: HY-101963**

**Bioactivity:** AD80, a multikinase inhibitor, inhibits RET, RAF, SRC, and S6K, with greatly reduced mTOR activity.

**Purity:** 99.46%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

### AZ 628
**Cat. No.: HY-11004**

**Bioactivity:** AZ628 is a pan-Raf kinase inhibitor with IC₅₀ of 105, 34 and 29 nM for B-Raf, B-RafV600E, and c-Raf-1, respectively.

**Purity:** 99.56%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

### B-Raf IN 1
**Cat. No.: HY-18227**

**Bioactivity:** B-Raf IN 1 is a highl potent and selective B-Raf inhibitor with IC₅₀ of 24 nM; equipotent against c-Raf (IC₅₀= 25 nM).

**Purity:** >98%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

### B-Raf inhibitor
**Cat. No.: HY-77251**

**Bioactivity:** A B-Raf inhibitor, pyrazine and pyrrolo[2,3-b]pyridine derivatives, useful in the treatment of cancer and proliferative diseases.

**Purity:** 99.76%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

### B-Raf inhibitor 1
**Cat. No.: HY-14177**

**Bioactivity:** B-Raf inhibitor 1 is a potent and selective B-Raf inhibitor with cell IC₅₀s of 0.31 μM and 2 nM for A375 proliferation and A375 p-ERK respectively.

**Purity:** 97.76%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

### B-Raf inhibitor 1 dihydrochloride
**Cat. No.: HY-14177A**

**Bioactivity:** B-Raf inhibitor 1 is a potent and selective B-Raf inhibitor with cell IC₅₀s of 0.31 μM and 2 nM for A375 proliferation and A375 p-ERK respectively.

**Purity:** >98%

**Clinical Data:** No Development Reported

**Size:** 5 mg, 10 mg, 50 mg, 100 mg

### BGB-283
**Cat. No.: HY-18957**

**Bioactivity:** BGB-283 is a novel and potent Raf Kinase and EGFR inhibitor with IC₅₀ values of 23 and 29 nM for recombinant BRaf V600E and EGFR, respectively.

**Purity:** 98.00%

**Clinical Data:** Phase 1

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

### BRAF inhibitor
**Cat. No.: HY-10247**

**Bioactivity:** BRAF inhibitor is a potent BRAF inhibitor.

**Purity:** 98.91%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 10 mg, 50 mg

### CCT196969
**Cat. No.: HY-12846**

**Bioactivity:** CCT196969, a pan-Raf inhibitor, inhibits B-Raf with an IC₅₀ of 0.1 μM.

**Purity:** 99.04%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

### CEP-32496
**(RXDX-105; Agerafenib)**
**Cat. No.: HY-15200**

**Bioactivity:** CEP-32496 is a highly potent and orally efficacious inhibitor of BRAF V600E with a Kᵣ of 14 nM.

**Purity:** 99.20%

**Clinical Data:** Phase 1

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

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Tel: 609-228-6898  Fax: 609-228-5909  Email: sales@MedChemExpress.com
<table>
<thead>
<tr>
<th>Compound</th>
<th>Cat. No.</th>
<th>Bioactivity</th>
<th>Purity</th>
<th>Clinical Data</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CEP-32496 hydrochloride</strong></td>
<td>HY-15199</td>
<td>CEP-32496 hydrochloride is a highly potent and orally efficacious inhibitor of $\text{BRAF}^{V600E}$ with a $K_d$ of 14 nM.</td>
<td>&gt; 98%</td>
<td>Phase 1</td>
<td>5 mg, 10 mg, 50 mg, 100 mg</td>
</tr>
<tr>
<td><strong>Dabrafenib</strong></td>
<td>HY-14660</td>
<td>Dabrafenib is an ATP-competitive inhibitor of $\text{Raf}$ with $IC_{50}$ of 5 nM and 0.6 nM for $C\text{-Raf}$ and $B\text{-Raf}^{V600E}$, respectively.</td>
<td>99.18%</td>
<td>Launched</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 500 mg</td>
</tr>
<tr>
<td><strong>Dabrafenib Mesylate</strong></td>
<td>HY-14660A</td>
<td>Dabrafenib Mesylate is a potent and selective Raf kinase inhibitor with $IC_{50}$ of 0.6 and 5.0 nM for $B\text{-Raf}^{V600E}$ and c-Raf, respectively.</td>
<td>99.94%</td>
<td>Launched</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 500 mg</td>
</tr>
<tr>
<td><strong>GDC-0879</strong></td>
<td>HY-50864</td>
<td>GDC-0879 is a potent and selective $B\text{-Raf}$ inhibitor with an $IC_{50}$ of 0.13 nM.</td>
<td>99.88%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg</td>
</tr>
<tr>
<td><strong>GW 5074</strong></td>
<td>HY-10542</td>
<td>GW 5074 is a potent and selective c-Raf inhibitor with $IC_{50}$ of 9 nM, and has no effect on the activities of JNK1/2/3, MEK1, MKK6/7, CDK1/2, c-Src, p38 MAP, VEGFR2 or c-Fms.</td>
<td>98.77%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</td>
</tr>
<tr>
<td><strong>H6G-64-1</strong></td>
<td>HY-12291</td>
<td>H6G-64-1 is a potent and selective B-Raf inhibitor extracted from patent WO 2011090738 A2, example 9 (XI-1); has a $IC_{50}$ of 0.09 μM on B-Raf V600E transformed Ba/F3 cells.</td>
<td>99.05%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</td>
</tr>
<tr>
<td><strong>L-779450</strong></td>
<td>HY-12787</td>
<td>L-779450 is a potent, ATP-competitive Raf kinase inhibitor ($IC_{50}$ = 10 nM) that displays &gt; 7, &gt; 30 and &gt; 70-fold selectivity over p38α, GSK3β and Lck respectively. $IC_{50}$ value: Target: Raf inhibitor L-779450 suppressed DNA synthesis and induced apoptosis in hematopoietic FDC-P1 cells transformed to...</td>
<td>98.75%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</td>
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<tr>
<td><strong>LGX818</strong></td>
<td>HY-15605</td>
<td>LGX818 is a highly potent RAF inhibitor with selective anti-proliferative and apoptotic activity in cells expressing $BRAF^{V600E}$ ($EC_{50}$ = 4 nM).</td>
<td>99.88%</td>
<td>Phase 3</td>
<td>10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg</td>
</tr>
<tr>
<td><strong>LXH254</strong></td>
<td>HY-112089</td>
<td>LXH254 is a potent CRAF inhibitor extracted from patent WO2018053136A1, Compound A. LXH254 also is a potent BRAF inhibitor.</td>
<td>99.94%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg</td>
</tr>
</tbody>
</table>

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**LY3009120**  
*Cat. No.: HY-12558*

**Bioactivity:** LY3009120 is a pan RAF inhibitor which inhibits B-Raf <sup>V600E</sup>, B-Raf <sup>WT</sup> and CRAF <sup>WT</sup> with IC<sub>50</sub> of 5.8, 9.1 and 15 nM, respectively.

**Purity:** 98.31%

**Clinical Data:** Phase 1

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

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**MLN 2480**  
*Cat. No.: HY-15246*

**Bioactivity:** MLN 2480 is an orally active and selective inhibitor of pan-Raf kinase.

**Purity:** 98.41%

**Clinical Data:** Phase 2

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

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**PLX-4720**  
*Cat. No.: HY-51424*

**Bioactivity:** PLX-4720 is a potent and selective inhibitor of B-Raf<sup>V600E</sup> with IC<sub>50</sub> of 13 nM in a cell-free assay, equally potent to c-Raf-1(Y340D and Y341D mutations), and 10-fold selectivity for B-Raf<sup>V600E</sup> i...

**Purity:** 99.73%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

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**PLX7904**  
*Cat. No.: HY-18997*

**Bioactivity:** PLX7904 is a potent and selective BRAF inhibitor, with IC<sub>50</sub> of appr 5 nM against BRAF<sup>V600E</sup> in mutant RAS expressing cells.

**Purity:** 98.34%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

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**PLX8394**  
*Cat. No.: HY-18972*

**Bioactivity:** PLX8394 is a potent and selective Raf inhibitor, with an IC<sub>50</sub> of appr 5 nM for B-Raf<sup>V600E</sup>.

**Purity:** 99.94%

**Clinical Data:** Phase 2

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

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**RAF265**  
*Cat. No.: HY-10248*

**Bioactivity:** RAF265 (CHIR-265) is a potent selective inhibitor of C-Raf/B-Raf/B-Raf<sup>V600E</sup> with IC50 of 3-60 nM, and exhibits potent inhibition on VEGFR2 phosphorylation with EC50 of 30 nM. IC50 value: 3-60 nM (B-Raf); 30 nM(EC50 for VEGFR2) [1] Target: B-Raf; VEGFR2; B-Raf<sup>V600E</sup> in vitro: RAF265 inhibits...

**Purity:** 99.72%

**Clinical Data:** Phase 2

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg

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**RAF709**  
*Cat. No.: HY-100510*

**Bioactivity:** RAF709 is a novel Raf kinase inhibitor extracted from patent WO2014151616A1, compound example 131, has an IC<sub>50</sub> of 0.5 and 1.8 nM for c-Raf and b-Raf, respectively.

**Purity:** 99.55%

**Clinical Data:** No Development Reported

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

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**Regorafenib**  
*Cat. No.: HY-10331*

**Bioactivity:** Regorafenib (BAY 73-4506) is a multi-targeted receptor tyrosine kinase inhibitor with IC<sub>50</sub> of 13/4.2/46, 22, 7, 1.5 and 2.5 nM for VEGFR1/2/3, PDGFRβ, Kit, RET and Raf-1, respectively.

**Purity:** 99.95%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

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**Regorafenib Hydrochloride**  
*Cat. No.: HY-13308*

**Bioactivity:** Regorafenib Hydrochloride is a multi-target inhibitor for VEGFR1/2/3, PDGFRβ, Kit, RET and Raf-1 with IC<sub>50</sub> of 13/4.2/46, 22, 7, 1.5 and 2.5 nM, respectively.

**Purity:** 98.67%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg

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**Regorafenib monohydrate**  
*Cat. No.: HY-10331A*

**Bioactivity:** Regorafenib monohydrate is a multi-target inhibitor for VEGFR1/2/3, PDGFRβ, Kit, RET and Raf-1 with IC<sub>50</sub> of 13/4.2/46, 22, 7, 1.5 and 2.5 nM, respectively.

**Purity:** 99.94%

**Clinical Data:** Launched

**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg
| **Ro 5126766**  
(CH5126766)  
Cat. No.: HY-18652 | **SB-590885**  
Cat. No.: HY-10966 |
<table>
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<tr>
<td><strong>Bioactivity:</strong> Ro 5126766 is a first-in-class dual MEK/RAF inhibitor that allosterically inhibits <strong>BRAF</strong>&lt;sup&gt;V600E&lt;/sup&gt;, <strong>CRAF</strong>, <strong>MEK</strong>, and <strong>BRAF</strong>&lt;sup&gt;IC&lt;sub&gt;50&lt;/sub&gt; 8.2, 56, 160 nM, and 190 nM, respectively).</td>
<td><strong>Bioactivity:</strong> SB-590885 is a potent <strong>B-Raf</strong> inhibitor with <strong>K&lt;sub&gt;i&lt;/sub&gt;</strong> of 0.16 nM, and has 11-fold greater selectivity for B-Raf over c-Raf, without inhibition to other human kinases.</td>
</tr>
</tbody>
</table>
| **Purity:** 97.92%  
**Clinical Data:** Phase 1  
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg | **Purity:** 99.03%  
**Clinical Data:** No Development Reported  
**Size:** 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg |

| **Sorafenib**  
(Bay 43-9006)  
Cat. No.: HY-10201 | **Sorafenib Tosylate**  
(Bay 43-9006)  
Cat. No.: HY-10201A |
<table>
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<tr>
<td><strong>Bioactivity:</strong> Sorafenib (Bay 43-9006) is a potent multikinase inhibitor with <strong>IC&lt;sub&gt;50&lt;/sub&gt;</strong> of 6 nM, 20 nM, and 22 nM for <strong>Raf-1</strong>, <strong>B-Raf</strong>, and <strong>VEGFR-3</strong>, respectively.</td>
<td><strong>Bioactivity:</strong> Sorafenib tosylate is a potent multikinase inhibitor, with <strong>IC&lt;sub&gt;50&lt;/sub&gt;</strong> of 6 nM, 20 nM, and 22 nM for <strong>Raf-1</strong>, <strong>B-Raf</strong>, and <strong>VEGFR-3</strong>, respectively.</td>
</tr>
</tbody>
</table>
| **Purity:** 99.83%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg | **Purity:** 99.73%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg |

| **TAK-632**  
Cat. No.: HY-15767 | **Vemurafenib**  
(RG7204; R7204; ROS185426; PLX4032)  
Cat. No.: HY-12057 |
<table>
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<tr>
<td><strong>Bioactivity:</strong> TAK-632 is a potent <strong>pan-RAF</strong> inhibitor with <strong>IC&lt;sub&gt;50&lt;/sub&gt;</strong> of 1.4, 2.4 and 8.3 nM for <strong>CRAF</strong>, <strong>BRAF</strong>&lt;sup&gt;V600E&lt;/sup&gt;, <strong>BRAF</strong>&lt;sup&gt;WT&lt;/sup&gt;, respectively.</td>
<td><strong>Bioactivity:</strong> Vemurafenib is a novel and potent inhibitor of <strong>B-RAF</strong> kinase, with <strong>IC&lt;sub&gt;50&lt;/sub&gt;</strong> of 31 and 48 nM for <strong>RAF</strong>&lt;sup&gt;V600E&lt;/sup&gt; and <strong>c-RAF-1</strong>, respectively.</td>
</tr>
</tbody>
</table>
| **Purity:** 99.13%  
**Clinical Data:** No Development Reported  
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg | **Purity:** 99.73%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g |

| **ZM 336372**  
Cat. No.: HY-13343 |  |
<table>
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<tr>
<td><strong>Bioactivity:</strong> ZM 336372 is a potent and selective c-Raf inhibitor with <strong>IC50</strong> of 70 nM, 10-fold selectivity over B-RAF, no inhibition to <strong>PKA/B/C, AMPK, p70S6, etc.</strong></td>
<td></td>
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</table>