

## Molecular Docking Results

### 1. KRAS Protein

| Drugs         | KRAS-Canonical | KRAS-201 | KRAS-202 | KRAS-205 | KRAS-214 |
|---------------|----------------|----------|----------|----------|----------|
| AZD-4785      | -6.9           | -7.3     | -7.2     | -7       | -7.2     |
| AZD-8835      | -8.3           | -8.2     | -8.2     | -8.7     | -7.9     |
| CC-223        | -7.2           | -7.7     | -7.5     | -7.5     | -7.7     |
| PD-0325901    | -7.7           | -7.3     | -6.9     | -6.9     | -7.4     |
| RIDAFOROLIMUS | -10.1          | -10.2    | -9.7     | -9.6     | -10.6    |
| SELUMETINIB   | -7.2           | -7.2     | -7.6     | -7.7     | -7.1     |
| TRAMETINIB    | -8.2           | -9       | -7.9     | -9.6     | -9       |

| Drugs         | KRAS-213 | KRAS-210 | KRAS-207 | KRAS-203 | KRAS-204 |
|---------------|----------|----------|----------|----------|----------|
| AZD-4785      | -6.4     | -7.9     | -5.8     | -5.7     | -4.7     |
| AZD-8835      | -7.7     | -8.5     | -6.5     | -6.3     | -4.9     |
| CC-223        | -7.3     | -7.7     | -6.1     | -6.1     | -4.5     |
| PD-0325901    | -6.3     | -6.8     | -6.1     | -5.4     | -4.3     |
| RIDAFOROLIMUS | -10.7    | -9.6     | -9.3     | -8.8     | -5.3     |
| SELUMETINIB   | -6.6     | -7.4     | -5.8     | -5.9     | -4.8     |
| TRAMETINIB    | -8.6     | -8.9     | -7       | -6.9     | -5.5     |

## 2. PIK3CA Protein

| <b>FDA Drugs</b> | <b>PIK3CA-Canonical</b> | <b>PIK3CA-201</b> | <b>PIK3CA-205</b> | <b>PIK3CA-203</b> | <b>PIK3CA-204</b> |
|------------------|-------------------------|-------------------|-------------------|-------------------|-------------------|
| ALPELISIB        | -8.9                    | -8.8              | -9.5              | -7.5              | -7.7              |
| BUPARLISIB       | -8.6                    | -8.2              | -8.1              | -6.2              | -6.4              |
| CAPIVASERTIB     | -9.5                    | -9.6              | -8.9              | -6.6              | -6.6              |
| INK-1117         | -9                      | -9                | -9                | -6.8              | -6.8              |
| SERABELISIB      | -8.9                    | -9.1              | -9                | -6.8              | -6.8              |
| TASELISIB        | -9.5                    | -9.7              | -8.2              | -7.2              | -6.9              |
| Temsirolimus     | -11.5                   | -11.6             | -10.2             | -9                | -9                |
| Trastuzumab      | -10.5                   | -9.6              | -9.6              | -6.8              | -7.7              |
| CC-223           | -8.6                    | -8.3              | -8                | -6.4              | -6.4              |

### 3. ERBB3 Protein

| <b>Drugs</b> | <b>ERBB3_Canonical</b> | <b>ERBB3-222</b> | <b>ERBB3-215</b> | <b>ERBB3-207</b> | <b>ERBB3-213</b> |
|--------------|------------------------|------------------|------------------|------------------|------------------|
| Pertuzumab   | -5.4                   | -4.4             | -5.7             | -5.7             | 6.3              |
| SAPITINIB    | -6.8                   | -5.5             | -7               | -7.3             | -7.3             |
| Trastuzumab  | -9.4                   | -7               | -8               | -6.2             | -7.2             |

| <b>Drugs</b> | <b>ERBB3-202</b> | <b>ERBB3-209</b> |
|--------------|------------------|------------------|
| Pertuzumab   | -4.7             | -5.4             |
| SAPITINIB    | -6.2             | -6.6             |
| Trastuzumab  | -7.6             | -7.9             |

#### 4. SMAD4 Protein

| <b>Drugs</b> | <b>SMAD4-Canonical</b> | <b>SMAD4-201</b> | <b>SMAD4-202</b> | <b>SMAD4-205</b> | <b>SMAD4-206</b> |
|--------------|------------------------|------------------|------------------|------------------|------------------|
| ALECTINIB    | -7.7                   | -8.6             | -9.4             | -9.9             | -8.3             |
| CRIZOTINIB   | -7.1                   | -7.2             | -9.8             | -8.7             | -8               |
| FLUOROURACIL | -4.7                   | -4.7             | -4.9             | -4.8             | -5               |
| GEMCITABINE  | -6.1                   | -5.3             | -7               | -5.4             | -7.2             |
| IRINOTECAN   | -9.2                   | -9.3             | -10.1            | -9.5             | -9.5             |
| Lysine       | -4.9                   | -4.7             | -4.6             | -4.2             | -4.7             |
| SAPANISERTIB | -7                     |                  | -8.6             | -7.1             | -7.2             |

| <b>Drugs</b> | <b>SMAD4-207</b> | <b>SMAD4-210</b> |
|--------------|------------------|------------------|
| ALECTINIB    | -8.6             | -7.5             |
| CRIZOTINIB   | -8               | -6.8             |
| FLUOROURACIL | -4.3             | -4.4             |
| GEMCITABINE  | -5.6             | -5.1             |
| IRINOTECAN   | -8.9             | -8.4             |
| Lysine       | -4.3             | -4.1             |
| SAPANISERTIB | -7               | -6.4             |

## 5. FBXW7 Protein

| <b>Drugs</b> | <b>FBXW7-Canonical</b> | <b>FBXW7-202</b> | <b>FBXW7-212</b> | <b>FBXW7-213</b> | <b>FBXW7-214</b> |
|--------------|------------------------|------------------|------------------|------------------|------------------|
| AR-42        | -7.2                   | -7.1             | -5.7             | -5.7             | -5.3             |
| BELINOSTAT   | -7.4                   | -7.2             | -5.3             | -5.3             | -5.9             |
| ENTINOSTAT   | -7.9                   | -7.8             | -5.7             | -5.7             | -6               |
| REGORAFENIB  | -8.3                   | -8.3             | -5.9             | -6.3             | -6.5             |
| Sirolimus    | -10.5                  | -10.4            | -7.4             | -7               | -6.9             |
| VORINOSTAT   | -6.3                   | -6.1             | -4.7             | -4.7             | -5               |

| <b>Drugs</b> | <b>FBXW7-215</b> | <b>FBXW7-203</b> |
|--------------|------------------|------------------|
| AR-42        | -5.7             | -6.9             |
| BELINOSTAT   | -5.7             | -7.3             |
| ENTINOSTAT   | -5.9             | -7.5             |
| REGORAFENIB  | -6.3             | -9               |
| Sirolimus    | -6.7             | -9.2             |
| VORINOSTAT   | -4.8             | -6.4             |