<table>
<thead>
<tr>
<th>Cancer Subtype</th>
<th>Gene symbol</th>
<th>Gene Name</th>
<th>Ensemble ID</th>
<th>Gene Function</th>
<th>Gene Top Neighbors</th>
<th>TCGA Mutation Rate</th>
<th>KEGG Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastric cancer (Hereditary)</td>
<td>UBE2M</td>
<td>ubiquitin-conjugating enzyme E2M</td>
<td>ENSG00000130725</td>
<td>Targeting abnormal or short-lived proteins for degradation</td>
<td>UBA3 FZR1 (CDH1) NEDD8</td>
<td>0.23%</td>
<td>Proteolysis</td>
</tr>
<tr>
<td>Gastric cancer (Hereditary)</td>
<td>UBA3</td>
<td>ubiquitin-like modifier activating enzyme 3</td>
<td>ENSG00000144744</td>
<td>Targeting abnormal or short-lived proteins for degradation</td>
<td>UBE2M FZR1 (CDH1) NEDD8</td>
<td>1.82%</td>
<td>Proteolysis</td>
</tr>
<tr>
<td>Gastric cancer (Hereditary)</td>
<td>RRAGA</td>
<td>Ras-related GTP binding A</td>
<td>ENSG00000155876</td>
<td>Regulation of cell growth</td>
<td>RPTOR LAMTOR3 RB1CC1</td>
<td>0.23%</td>
<td>mTOR signaling pathway</td>
</tr>
<tr>
<td>Gastric cancer (Gastrointestinal)</td>
<td>NKK3-1</td>
<td>NK3 homeobox 1</td>
<td>ENSG00000167034</td>
<td>Negative regulator of epithelial cell growth</td>
<td>PTEN ATM CASP8</td>
<td>1.14%</td>
<td>PI3K signaling pathway</td>
</tr>
<tr>
<td>Gastric cancer (Gastrointestinal)</td>
<td>KIDINS</td>
<td>kinase D-interacting substrate, 220kDa</td>
<td>ENSG00000134313</td>
<td>Cell survival and grow</td>
<td>BRAF CAT</td>
<td>5.91%</td>
<td>Trk signaling pathway</td>
</tr>
<tr>
<td>Gastric cancer (Gastrointestinal)</td>
<td>RIPK4</td>
<td>receptor-interacting serine-threonine kinase 4</td>
<td>ENSG00000183421</td>
<td>Serine/threonine protein kinase that interacts with protein kinase C-delta and also activate NFkappaB4</td>
<td>ERBB2IP KRAS ATR MAP2K2 MAP2K1 PTEN KLF4 PRDM4 WT1 PTPN11</td>
<td>4.09%</td>
<td>Not determined (most probably RAS signaling pathway)</td>
</tr>
<tr>
<td>Melanoma</td>
<td>CIT</td>
<td>citron rho-interacting serine/threonine kinase</td>
<td>ENSG00000122986</td>
<td>Involvement in the cytokinesis</td>
<td>RAC1 CDC42,</td>
<td>9.38</td>
<td>Most probably Wnt signaling pathway</td>
</tr>
</tbody>
</table>
