



Figure 2. GDNF family of ligands and their receptors. The four members of the glial cell line-derived neurotrophic factor (GDNF) family of ligands, which include GDNF, neurturin, artemin, and persephin, are homodimers which bind with high affinity to one of the four members of the GDNF receptor α family (GFR α 1-4). These receptor-ligand complexes can interact with and activate the canonical GDNF receptor Ret, a receptor tyrosine kinase. GDNF can also activate alternative GDNF receptors, such as the neuronal cell adhesion molecule (NCAM). The intracellular domain of Ret can be phosphorylated and ubiquitinated.