

Table 4: Protein multimer members. The GENE.FAMILY column shows the gene family name defined either by HGNC (superscript ‘H’, [http://www.genenames.org/cgi-bin/family\\_search](http://www.genenames.org/cgi-bin/family_search)) or curated manually by us from Entrez IDs in the NCBI database (superscript ‘C’ for ‘Custom’) that we have identified as corresponding for each ENTITY.ID. The members of each gene family that are in at least one of our synaptic proteome datasets are shown in IN.SYNAPSE, whereas those not found in any datasets are in the column OUT.SYNAPSE. In some cases the intersection of two HGNC gene families are needed to specify the membership of our protein family; this is indicated by concatenation of the names with an ampersand.

ENTITY.ID	GENE.FAMILY	IN.SYNAPSE	OUT.SYNAPSE
AMPAR	Glutamate ionotropic receptor AMPA type subunits <sup>H</sup>	<i>GRIA1, GRIA2, GRIA3, GRIA4</i>	
CaMKII	calcium/calmodulin-dependent protein kinases II <sup>C</sup>	<i>CAMK2A, CAMK2B, CAMK2D, CAMK2G</i>	
CK2	Casein kinase 2 <sup>C</sup>	<i>CSNK2A1, CSNK2A2, CSNK2B</i>	<i>CSNK2A3</i>
Gabg	Heterotrimeric G protein <sup>C</sup>	<i>GNA11, GNA12, GNA13, GNA14, GNAI1, GNAI2, GNAI3, GNAL, GNAO1, GNAQ, GNAS, GNAT1, GNAT2, GNAT3, GNAZ, GNB1, GNB2, GNB3, GNB4, GNB5, GNG10, GNG12, GNG13, GNG2, GNG3, GNG4, GNG7, GNG8</i>	<i>GNA15, GNG11, GNG5</i>
Gbg	G-protein beta-gamma subunit <sup>C</sup>	<i>GNB1, GNB2, GNB3, GNB4, GNB5, GNG10, GNG12, GNG13, GNG2, GNG3, GNG4, GNG7, GNG8</i>	<i>GNG11, GNG5</i>
NMDAR	Glutamate ionotropic receptor NMDA type subunits <sup>H</sup>	<i>GRIN1, GRIN2A, GRIN2B, GRIN2C, GRIN2D</i>	<i>GRIN3A, GRIN3B</i>
PKA	Protein kinase A <sup>C</sup>	<i>PRKACA, PRKACB, PRKAR1A, PRKAR1B, PRKAR2A, PRKAR2B</i>	<i>PRKACG</i>
PP2	Protein phosphatase 2 <sup>C</sup>	<i>PPP2CA, PPP2CB, PPP2R1A, PPP2R1B, PPP2R2A, PPP2R2C, PPP2R2D, PPP2R3A, PPP2R5A, PPP2R5B, PPP2R5C, PPP2R5D, PPP2R5E, STRN, STRN3, STRN4</i>	<i>PPP2R2B, PPP2R3B, PPP2R3C</i>
PP3	Calcineurin <sup>C</sup>	<i>PPP3CA, PPP3CB, PPP3CC, PPP3R1</i>	<i>PPP3R2</i>