Granin (chromogranin and secretogranin) is a protein family of regulated secretory proteins ubiquitously found in the cores of amine and peptide hormone and neurotransmitter dense-core secretory vesicles.

see Chromogranin A.

Castañeyra-Ruiz et al. tested whether the lack of chromogranins (Cgs) A and B could provoke CNS disorders when combined with an excess of dopamine. We chronically treated (over 6 months) mice lacking both chromogranins A and B (Cgs-KO) with a low oral dosage of L-DOPA/benserazide (10/2.5 mg/kg). Motor performance in the rota-rod test, open field activity, and metabolic cages indicated a progressive impairment in motor coordination in these mice, and an increase in rearing behavior, which was accompanied by an increase in DA within the substantia nigra. We conclude that mild chronic L-DOPA treatment does not produce nigro-striatal toxicity that could be associated with parkinsonism, neither in control nor Cgs-KO mice. Rather, Cgs-KO mice exhibit behaviors compatible with an amphetamine-like effect, probably caused by the excess of catecholamines in the CNS [1)].

1)

Castañeyra-Ruiz L, Castañeyra A, González-Santana A, Machado JD, Borges R. Combining the lack of chromogranins with chronic L-DOPA treatment affects motor activity in mice. Cell Tissue Res. 2020 Jan 3. doi: 10.1007/s00441-019-03159-8. [Epub ahead of print] PubMed PMID: 31900665.