

1. Record Nr.	UNINA9910557717603321
Autore	Ey Elodie
Titolo	Shankopathies: Shank Protein Deficiency-Induced Synaptic Diseases
Pubbl/distr/stampa	Frontiers Media SA, 2020
Descrizione fisica	1 electronic resource (231 p.)
Soggetti	Science: general issues Neurosciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Shank (also known as ProSAP) is a family of postsynaptic scaffolding proteins that are thought to be involved in the regulation of excitatory synapse development, function, and plasticity. The Shank family contains three known members (Shank1, Shank2, and Shank3). These proteins are equipped with various domains for protein-protein interactions known to mediate direct and indirect interactions with many other synaptic proteins, including glutamate receptors, other synaptic scaffolding proteins, and signaling molecules. Importantly, Shank has been implicated in diverse neuropsychiatric disorders, including autism spectrum disorders, schizophrenia, and Phelan-McDermid syndrome, a form of developmental delay and intellectual disability. The mechanisms underlying these abnormalities, collectively termed "Shankopathies," are being actively investigated, although overall progress has been slow for many reasons.