



**Supplementary Figure S1.** Disease symptoms of RASopathies. The information on disease symptoms was extracted from the OMIM database. Symptoms were roughly classified according to the region in the body that is affected. Abbreviations: NS, Noonan syndrome; NF1, neurofibromatosis type 1; CFC, cardiofaciocutaneous; LS, LEOPARD syndrome; HGF, hereditary gingival fibromatosis; CM-AVM, capillary malfunction - arteriovenous malfunction; ALPS, autoimmune lymphoproliferative syndrome.