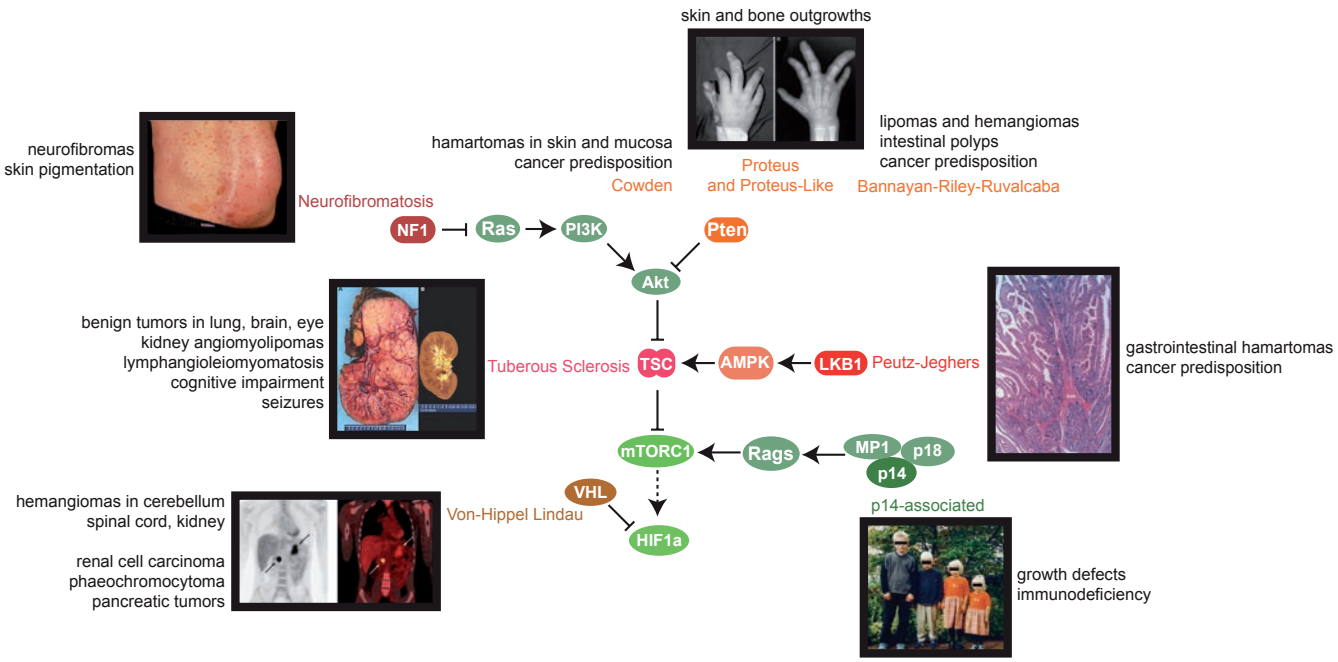

Supplementary information S1 (figure) | mTOR-related human syndromes
A series of germline mutations in genes involved in mTOR signaling pathways lead to different syndromes characterized by mTORC1 hyperactivity. With the exception of the syndrome caused by p14 mutation, these syndromes are caused by alterations in tumor suppressor genes, and consequently, are characterized by the spontaneous development of different tumors and other clinical manifestations. Image of gigantism of fingers in Proteus syndrome is reproduced, with permission, from REF. 1 © (2002) Macmillan Publishers Ltd. All rights reserved. Image of neurofibromas and skin pigmentation in neurofibromatosis is reproduced, with permission, from REF. 2 © (2007) Macmillan Publishers Ltd. All rights reserved. Image of intestinal tumor in LKB1 syndrome is reproduced, with permission, from REF. 3 © (2007) Macmillan Publishers Ltd. All rights reserved. Image of renal tumor in tuberous sclerosis is reproduced, with permission, from REF. 4 © (2009) Macmillan Publishers Ltd. All rights reserved. Image of phaeochromocytoma and pancreatic endocrine tumor in VHL is reproduced, with permission, from REF. 5 © (2009) Macmillan Publishers Ltd. All rights reserved. Image of short stature and hypopigmentation in p14-associated syndrome is reproduced, with permission, from REF. 6 © (2007) Macmillan Publishers Ltd. All rights reserved.

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