

NT factors
(ex:BDNF)

NT Rc

mGluR Rc

NMDA Rc

↑Ca²⁺

PTEN

PI3K

Ras

NF1

Akt

ERK

TSC2

TSC1

E3 Ub
ligase

Pam / Phr1

FBXO45

Rheb

?
GEF
function

Pam / Phr1

Other
synaptic targets ?

Neurodevelopment

4E-BP

mTOR

S6K

eIF4E

S6

Synaptic Plasticity
Local Protein Synthesis
Neuronal Activity