Intra-Golgi and retrograde Golgi-to-ER traffic

Rho GTPase cycle B3GALTL causes Peters-plus syndrome (PpS)

NRAGE signals death through JNK Signaling by Receptor Tyrosine Kinases

O-glycosylation of TSR domain-containing proteins

Oncogenic MAPK signaling

p.adjust

0.002

0.004

0.006 0.008

> 100 200

> 300

size

Cell death signalling via NRAGE, NRIF and NADE

Death Receptor Signalling

Diseases of signal transduction Ion channel transport

Organelle biogenesis and maintenance DAG and IP3 signaling

G-protein mediated events

Transmission across Chemical Synapses

SLC-mediated transmembrane transport

Neuronal System Calmodulin induced events Intracellular signaling by second messengers

Ca-dependent events

CaM pathway

PLC beta mediated events

Transport of inorganic cations/anions and amino acids/oligopeptides

Mitotic Spindle Checkpoint

Netrin-1 signaling Synthesis of very long-chain fatty acyl-CoAs

Amplification of signal from unattached kinetochores via a MAD2 inhibitory signal Histidine, lysine, phenylalanine, tyrosine, proline and tryptophan catabolism

> Amplification of signal from the kinetochores Mitotic Prometaphase