Intracellular signaling by second messengers

Antigen processing: Ubiquitination & Rroteasome eggradatistiption pathway HS-GAG biosynthesis L1CAM interactions

Apoptotic execution phase Signaling by MET Neurotransmitter receptors and postsynaptic signal transmission

Apoptotic cleavage of cellular proteins

Non-integrin membrane-ECM interactions

Extracellular matrix organization

Neuronal System

PI Metabolism Transmission across Chemical Synapses NRAGE signals death through JNK Phospholipid metabolism

Cell death signalling via NRAGE, NRIF and NADE Signaling by BRAF and RAF fusions Netrin-1 signaling

Synthesis of PIPs at the plasma membrane Intra-Golgi and retrograde Golgi-to-ER traffic

Signaling by Receptor Tyrosine Kinases Stimuli-sensing channels

Oncogenic MAPK signaling Notch-HLH transcription pathway

Ion channel transport

Amplification of signal from the kinetochores HDR through Single Strand Annealing (SSA) Amplification of signal from unattached kinetochores via a MAD2 inhibitory signal

Protein-protein interactions at synapses

100 200 300 p.adjust 0.005 0.010 0.015 0.020

size