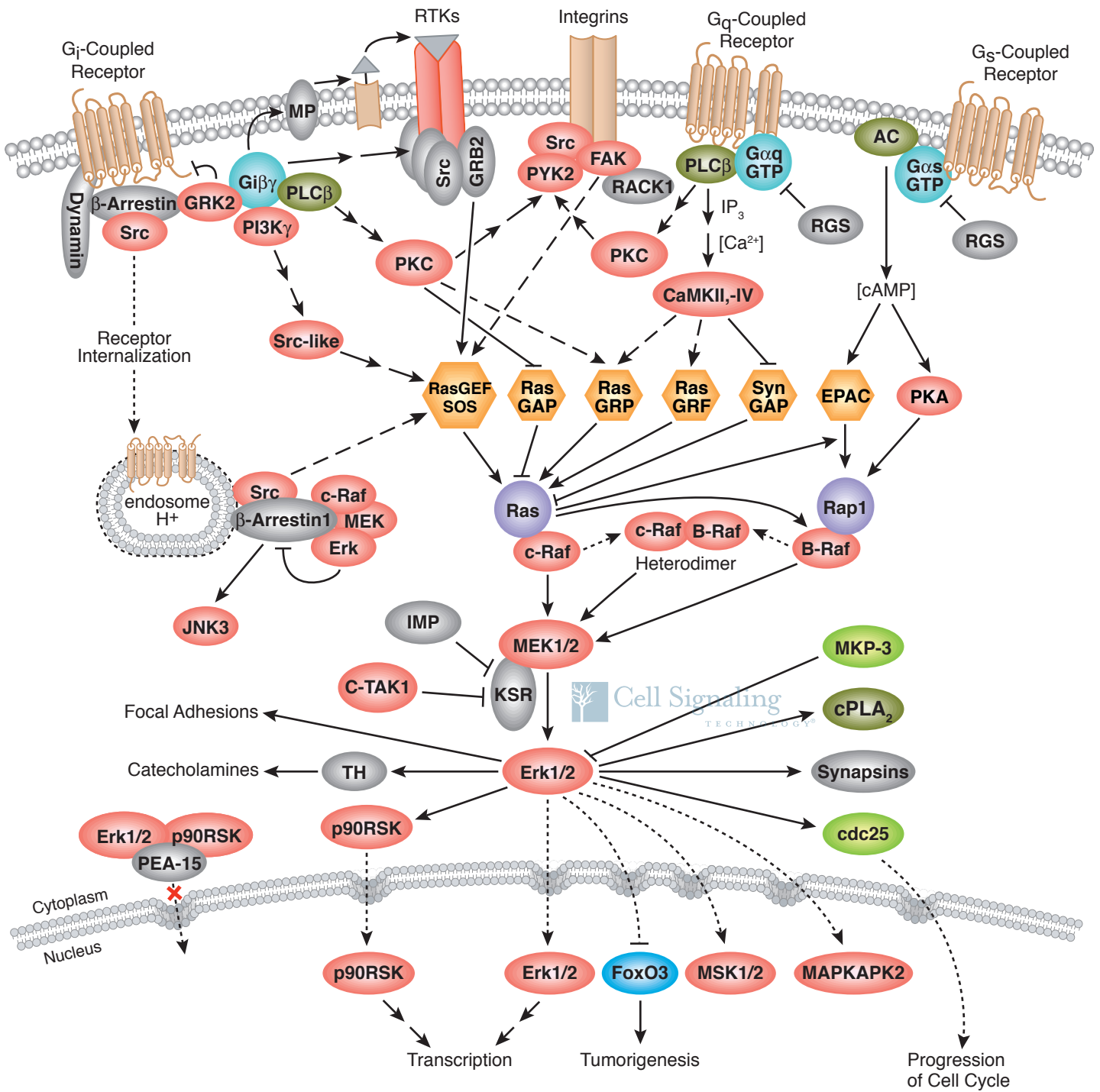


























G-Protein Coupled Receptor Signaling to MAPK/ERK



Signaling Pathways Key

 Kinase	 Direct Stimulatory Modification
 Phosphatase	 Direct Inhibitory Modification
 Transcription Factor	 Multistep Stimulatory Modification
 Caspase	 Multistep Inhibitory Modification
 Receptor	 Tentative Stimulatory Modification
 Enzyme	 Tentative Inhibitory Modification
 Cyclin, pro-apoptotic	 Transcriptional Stimulation
 pro-survival	 Transcriptional Inhibition
 GAP / GEF	 Translocation
 GTPase	 Separation of Subunits or Cleavage Products
 G-protein, ribosomal subunit	 Joining of Subunits
 Acetylase	
 Deacetylase	