## ADHERENS JUNCTION Tight Junction Inside Outside Inside Trans-interactions of E-cadherins Regulation of actin cytoskeleton Trans-interactions GTP of nectins GŢP K06081.. (active) K06085 K06086 K06084 K05627 NWASP K05748... K05700 Strong Adhesion K05689 Actin polymerization-Formation of A Js Ca<sup>2+</sup> RPTPs (active) GTP LMWPTF Trafficking K05696 ER and Golgi Gene Free β-catenin expression K05698 Recycling Wnt signaling pathway Cell growth, differentiation DNA Endocytosis — — > Degradation GDP (inactive) p120ctn $^{\rm GDP}_{\rm (inactive)}$ Weak Adhesion K05689 K05689 K05690 K05701 +p +p +p Fer RPTKs ţp GDP K05705 PTKs External signals MAPK Cytokinesignaling pathway cytokine receptor K05689 0 interaction K05707 \$0 <sup>1</sup>DNA DNA TGF-beta signaling pathway K04388... K04500 04520 3/1/13 (c) Kanehisa Laboratories