Cell Cycle Checkpoints

Mitotic Spindle Checkpoint

Amplification of signal from unattached kinetochores via a MAD2 inhibitory signal

Resolution of Sister Chromatid Cohesion

Amplification of signal from the kinetochores

Mitotic Prometaphase

Post-translational protein phosphorylation

size

20

0.030

0.035 0.040

p.adjust 0.025

Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs)

Collagen degradation

Collagen formation

Collagen chain trimerization

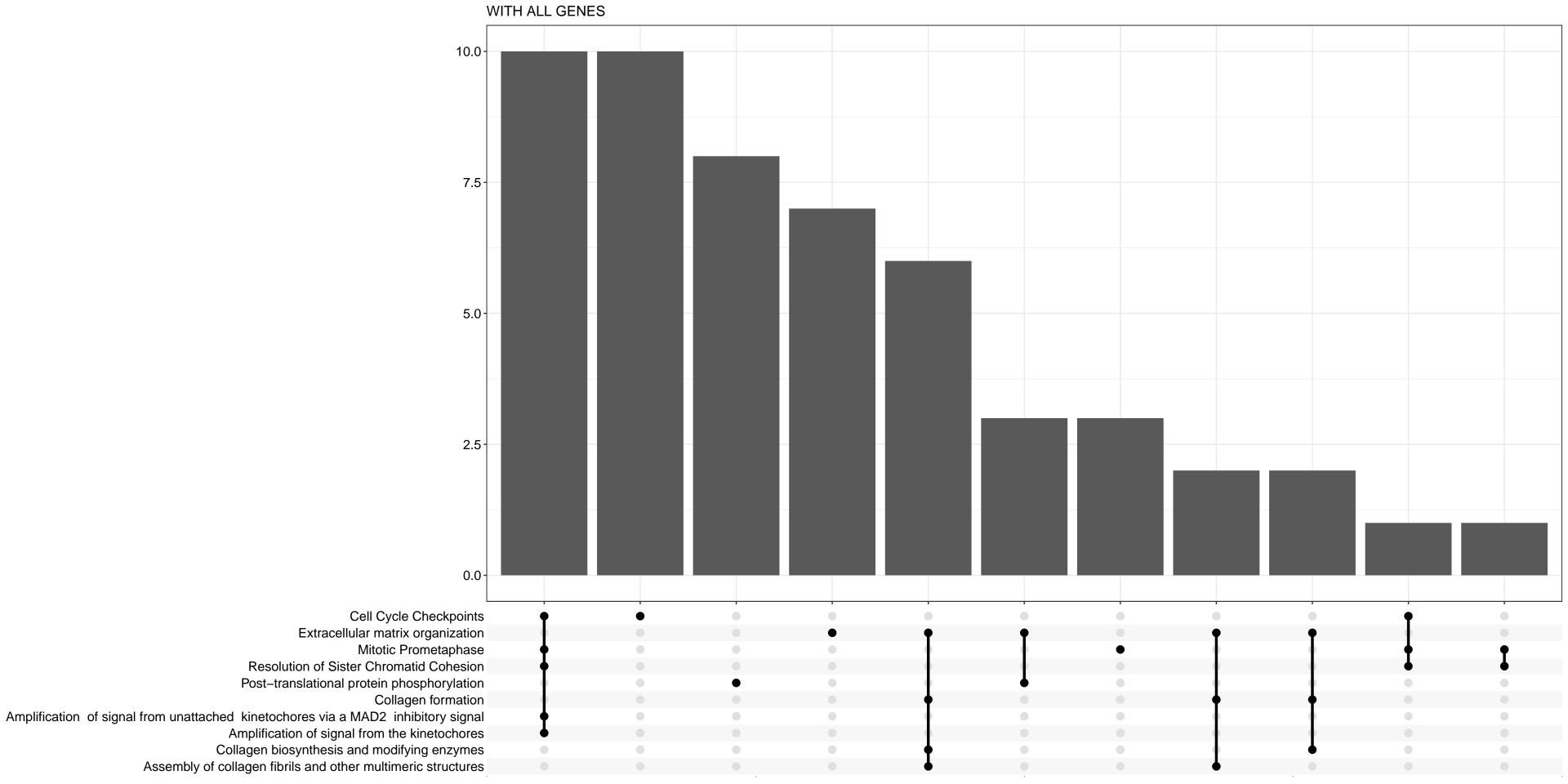
Collagen biosynthesis and modifying enzymes

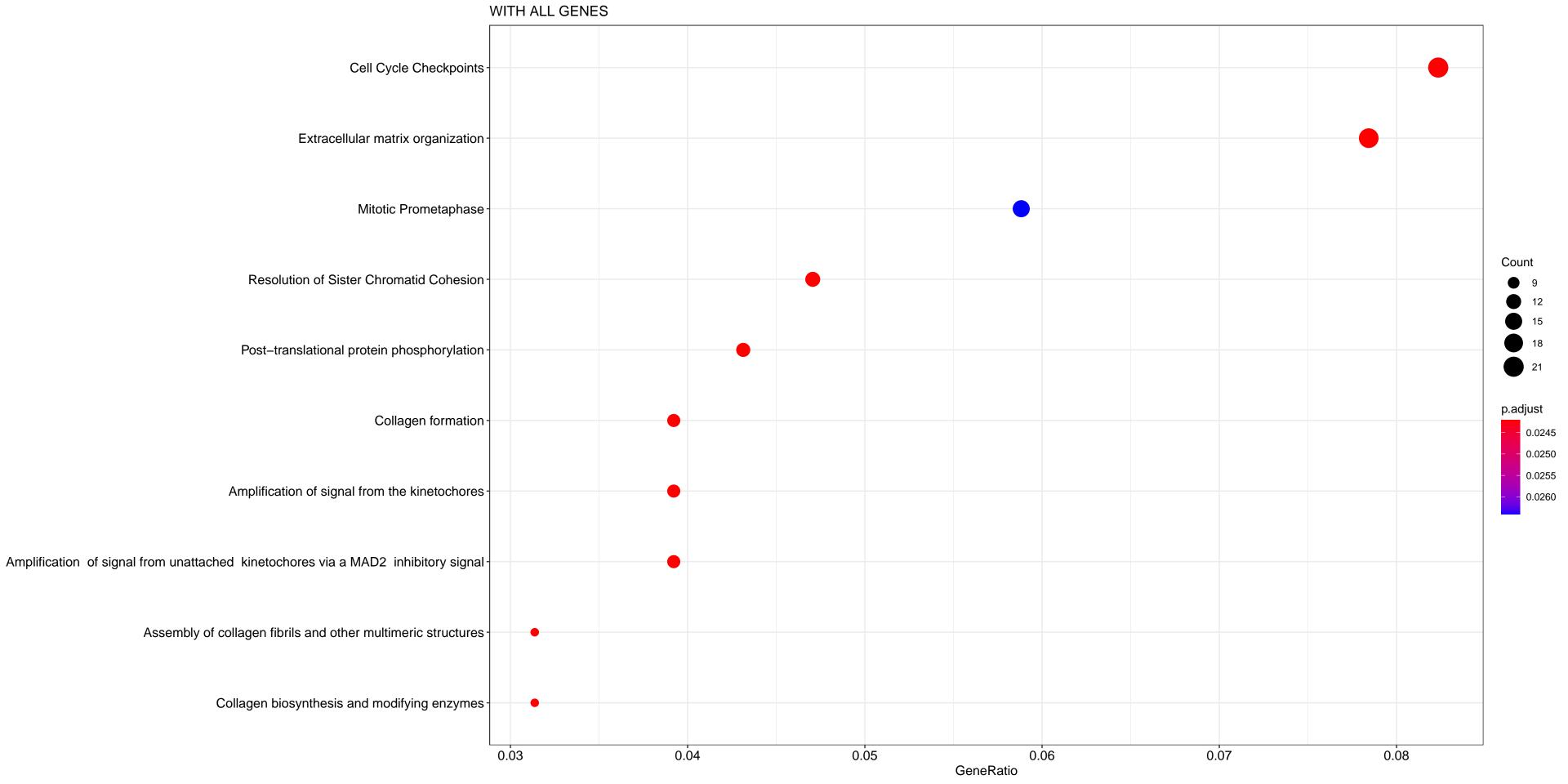
MET activates PTK2 signaling

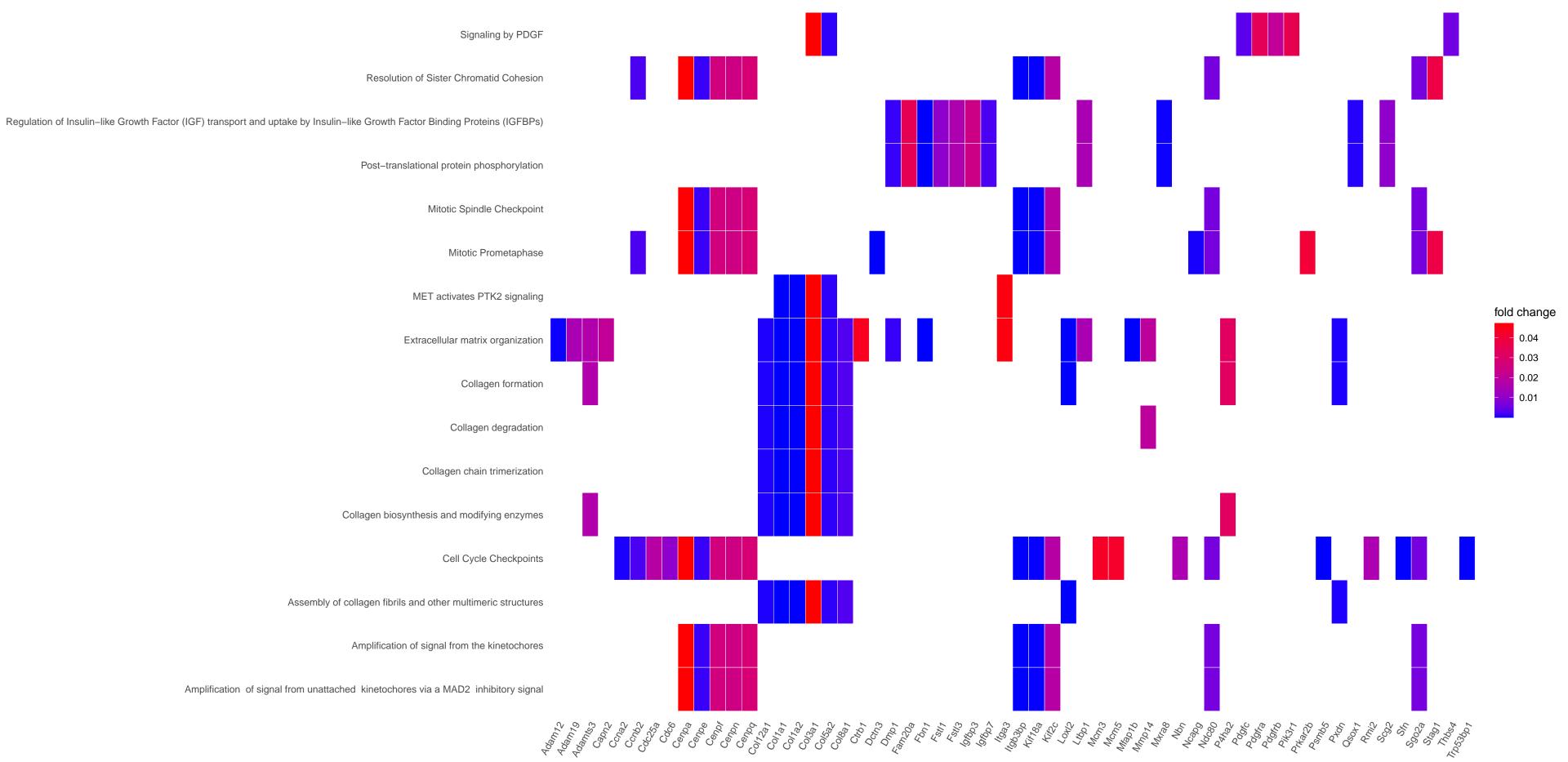
Assembly of collagen fibrils and other multimeric structures

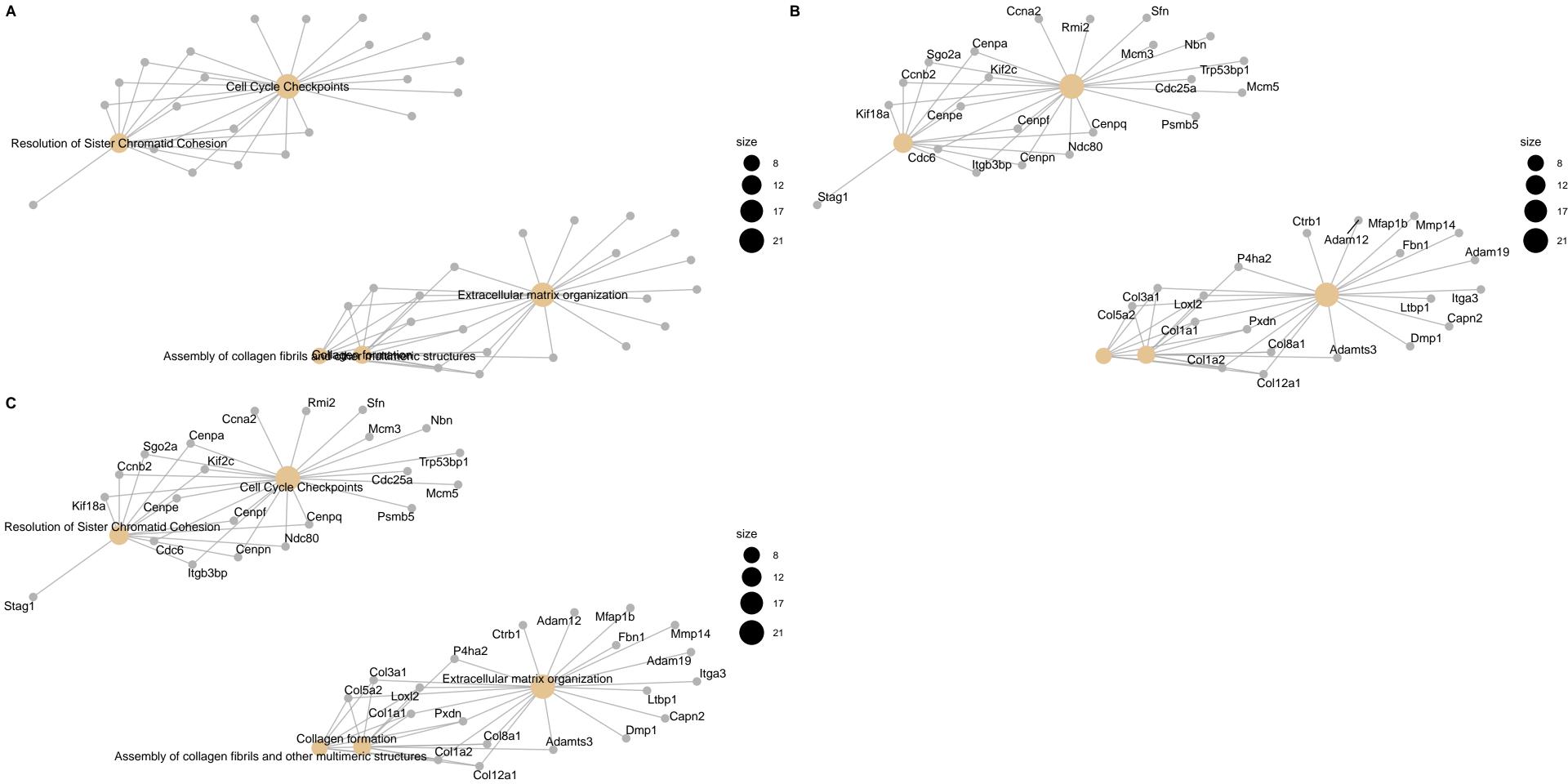
Signaling by PDGF

Extracellular matrix organization









Mitotic Spindle Checkpoint

Kinesins

Cell Cycle Checkpoints

M Phase

Mitotic Prometaphase

Amplification of signal from the kinetochores

RHO GTPases Activate Formins

Mitotic Metaphase and Anaphase Separation of Sister Chromatids

Signaling by Rho GTPases Mitotic Anaphase

Resolution of Sister Chromatid Cohesion

COPI-dependent Golgi-to-ER retrograde traffic

RHO GTPase Effectors

MHC class II antigen presentation

Factors involved in megakaryocyte development and platelet production

Golgi-to-ER retrograde transport

n —Amplification of signal from unattached kinetochores via a MAD2 inhibitory signal Extracellular matrix organization

Collagen formation

Platelet Adhesion to exposed collagen

Integrin cell surface interactions

GP1b-IX-V activation signalling

MET activates PTK2 signaling

MET promotes cell motility

Assembly of collagen fibrils and other multimeric structures

Collagen biosynthesis and modifying enzymes

Crosslinking of collagen fibrils

