Supplementary figure 1. Model figure for present findings.

Stimulus

\[ \downarrow \]

Growth factor receptor

\[ \downarrow \]

MAPKKK

\[ \downarrow \]

MAPKK

\[ \downarrow \]

MAPK

\[ \downarrow \]

Biological responses

miR-148a↓

\[ \downarrow \]

IGF-IR↑

\[ \downarrow \]

MAPKKK

P MEK1↑

MKK3,6

MKK4,7

P ERK↑
P P38 MAPK↑
P JNK↑

Gene transcription

Proliferation, Migration, Invasion↑