



ASPM is an oncoprotein and activates EGFR

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ASPM is a protein required for the correct assembly and function of microtubule spindles. It participates in human brain development as well and is overexpressed in all tumours studied so far. We are interested in further characterizing ASPM function as it is unclear why it affects brain growth and is related to cancer. This prompted us to isolate ASPM-binding proteins. We found that EGFR (Epidermal Growth Factor Receptor), a protein highly involved in cancer, would bind ASPM. Furthermore, ASPM promotes activation of EGFR by phosphorylation resulting in a more active MAP kinase pathway. Our findings explain the involvement of ASPM in cancer, set ASPM as a new therapeutic target, and demonstrate a novel activity of the protein not related to mitosis.

[1]Encarnação JM, Stallinga P, Ferreira GNM, "Influence of electrolytes in the QCM response: Discrimination and quantification of the interference to correct microgravimetric data", *Biosens. Bioel.* (2007) **22**:1351-1358.