

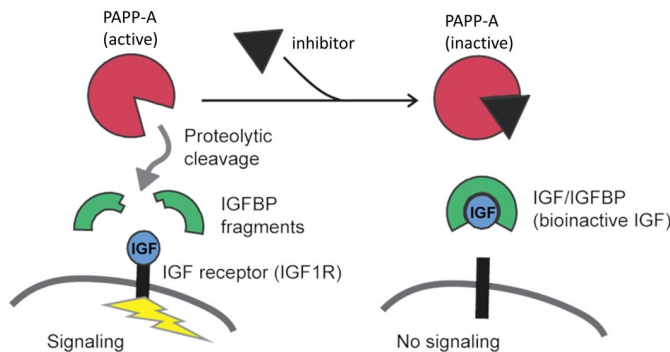


Proteolytic regulation of growth factor signaling – its relevance to vertebrate growth and human disease

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Activity of the IGFs – evolutionary conserved growth factors – is regulated in the extracellular environment. The pappalysin metalloproteinases, PAPP-A and PAPP-A2, have emerged as highly specific proteolytic enzymes involved in the regulation of IGF signaling. The only known pappalysin substrates are a subset of the IGF binding proteins (IGFBPs), which bind IGF with high affinity to antagonize receptor binding. By cleaving IGFBPs, the pappalysins therefore have the potential to increase IGF bioactivity and hence promote IGF signaling. This is important in both systemic and local IGF regulation, in normal and several pathophysiological conditions. Thus, knowledge of this regulatory system potentially allows the development of novel therapeutic strategies relevant to human disease.



Friday, May 24th from 13.00 to 13.45 in the Zoophysiology Seminar Room (1131-127)