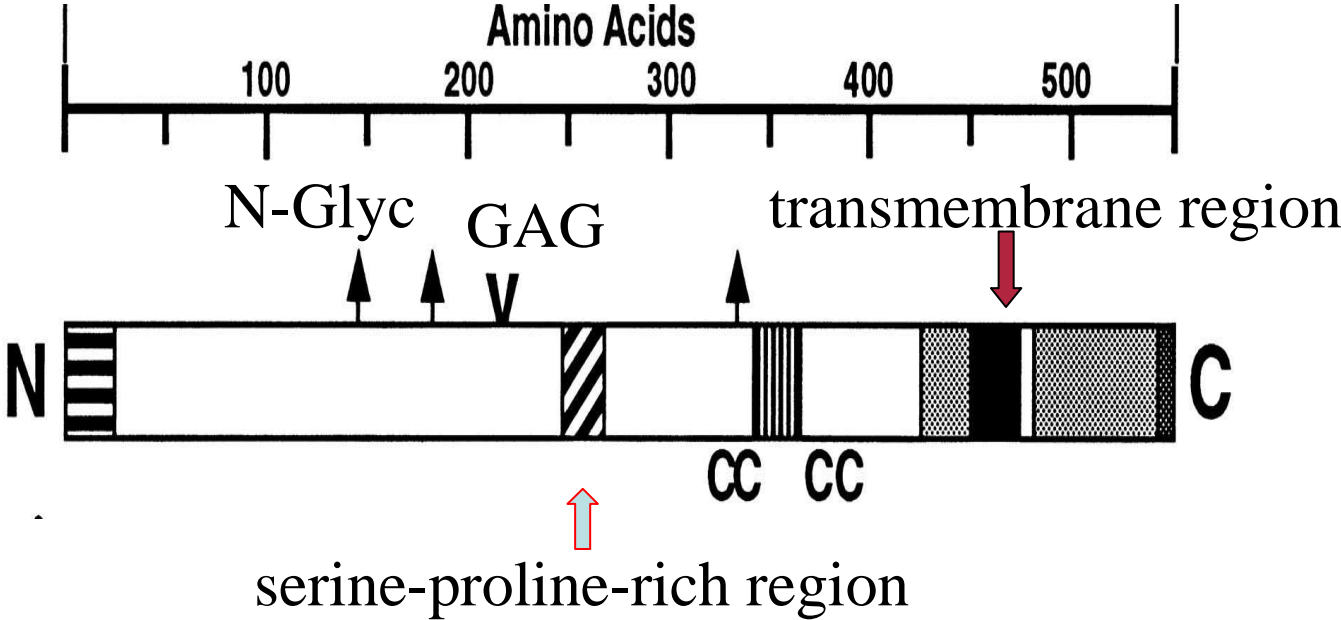


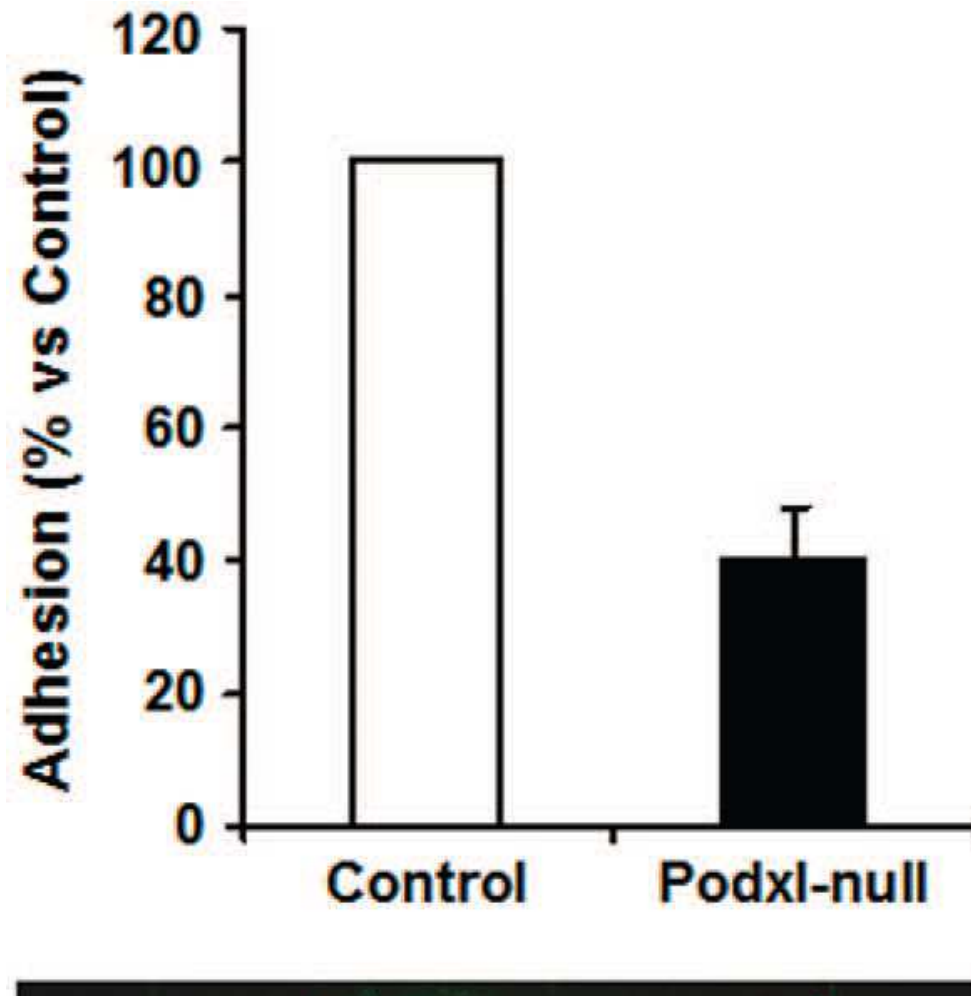
# Erythropoietin modulation of podocalyxin and a proposed erythroblast niche

Overexpression of podocalyxin-like protein is an independent factor of poor prognosis in colorectal cancer

# Podocalicina



Kershaw D B et al. J. Biol. Chem. 1995;270:29439-29446



Adherence of platelets to immobilized collagen

# CNTO 530 functions as a potent EPO mimetic via unique sustained effects on bone marrow proerythroblast pools

## Sathyanarayana P

Anemia as associated with numerous clinical conditions can be debilitating, but frequently can be treated via administration of epoetin-alfa and darbepoietin-alfa. Despite the complexity of EPO-EPO receptor interactions, the development of interesting EPO mimetic peptides (EMPs) also has been possible.

CNTO 530 is one such novel MIMETIBODY Fc-domain dimeric EMP fusion protein.

In a mouse model, single-dose CNTO 530 (unlike epoetin-alfa or darbepoietin-alfa) bolstered red cell production for up to 1 month. In 5-fluorouracil models, CNTO 530 also protected against anemia with unique efficiency. These actions were not fully accounted for by half-life estimates, and CNTO 530 signaling events therefore were studied. Within primary bone marrow erythroblasts, kinetics of STAT5, ERK, and AKT activation were similar for CNTO 530 and epoetin-alfa. p70S6K activation by CNTO 530 was selectively sustained. In vivo, **CNTO 530 uniquely stimulated the enhanced formation of PODXLhigh proerythroblasts at frequencies multifold above epoetin-alfa or darbepoietin-alfa.**

Based on these distinct erythropoietic and EPOR signaling properties, CNTO 530 holds excellent promise as a new EPO mimetic.