

Cripto Antagonists: Powerful Inhibitors of Tumor Growth

Cripto is a recognized oncogene that plays a key role in cancer. Antibodies to Cripto are currently in clinical development for solid tumors. A detailed characterization of Cripto and its role in tumorigenesis is underway at the Clayton Laboratories for Peptide Biology, Salk Institute, under the direction of Dr. Wylie Vale.

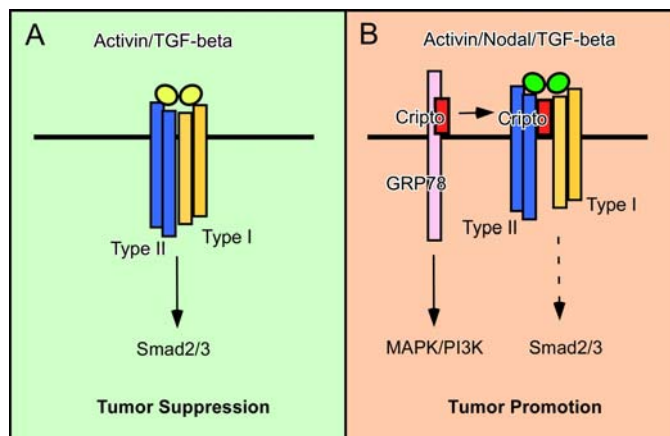
Cripto causes tumor promotion by binding to Activin/Nodal/TGF-beta. Drs. Vale and Gray developed a mutant protein, ALK4-L75A, which is a soluble Alk4 receptor that sequesters Cripto. In the absence of Cripto, the Activin/TGF-beta complex no longer promotes tumor growth but instead sends a tumor suppression signal. ALK-L75A is therefore an excellent therapeutic candidate.

Dr. Vale, Gray and their colleagues have also recently discovered that Cripto's oncogenic function in promoting tumor growth and spread is regulated through its interaction with GRP78, another key survival factor in cancer. This has led to the development of specific blockers of the cell surface Cripto/GRP78.

Cripto antagonists in development:

-Alk4-L75A is a therapeutic candidate to treat solid tumors -> *in vitro* and *in vivo* proof of concept of the efficacy of this novel anti-tumor agent.

- Antibodies, peptides or small molecules that target the oncogenic function of Cripto or GRP78 by disrupting their interaction -> *Advantage of enhanced specificity and therefore increased potency and reduced side-effects compared to antibodies that only target GRP78 or Cripto.*



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Property

Worldwide intellectual property protection for this technology is owned by Research Development Foundation.

[Cripto Antagonism of Activin and TGF-B Signaling](#) World wide coverage including US10/940431, EP1670511

[Compositions and Methods for the Inhibition of Cripto / GRP78 Complex Formation and Signaling](#) . PCT/US2009/063748, US12/615033

Available for licensing or partnering

For more information, please contact our business development unit:

Dr. Alexandra Richardson +41-76-342-7147 - arichardson@claytonbiotech.com