Immunogenic epitopes as targets for universal cancer vaccines

OCR Number: OCR 5120

Description:

- Unlike other vaccine-based technologies, OCR 5120 is not cancer-type specific, but a "pan-vaccine" antigen opportunity
- The human immune system can respond to OCR5120 and identify the specific immunogenic epitopes derived from the OCR5120 antigen (see figure) as a matter of surveillance rather than response.
- OCR5120 target:
  - is important in self-renewal and maintenance of pluripotency in embryonic stem cells
  - is not cancer-type specific
  - is a "pan-vaccine" antigen
- Applications:
  - universal target for a general cancer vaccine
  - OCR5120-specific cellular preventive therapy for preventing cancer-like sides effects arising from stem cell-based therapies

![Figure 1: Map of OCR5120 immunogenic epitopes derived from human antigen isolated from patients (Short Blue) and vaccine candidate (Long Blue; OCR5120).](image)

Stage of Development: Human peptides as vaccine candidate compositions have been isolated and described.

Licensing Contact: David Lewin
david.lewin@yale.edu