Intellectual Property (Non-confidential)



# Humanized T84.66 antibody targeting CEA



## DESCRIPTION

Monoclonal antibodies have a great potential for diagnostic and therapeutic applications. One of the key issues for its in-vivo use has been the response of human immune system to the xenogeneic antibodies leading to rapid clearance. There was further improvement over the production of of the issues antibodies; however some encountered were, recognized limited antigens, poor expression, and decreased antigen binding affinity. The present invention uses efficient complementarities determining region (CDR) grafting techniques to generate humanized T84.66 antibody from mammalian cell lines. The humanized T84.66 antibody developed was able to specifically target and trigger immune response

against the tumor expressing carcinoembryonic antigen (CEA). Further the antibody was conjugated with chemotherapeutic agents, radiolabels and a cytokine.

### KEY ASPECTS

- The humanized T84.66 antibodies developed exhibited great binding affinity and specificity to target tumors expressing CEA
- The antibody developed triggered immune response against tumors expressing CEA
- The humanized antibody is attached with conjugate like a chemotherapeutic agent, a radiolabel, and a cytokine for radioimmunotherapy and radioimmunoimaging

#### INTELLECTUAL PROPERTY

Title	US Patent Number	lssued
Humanized anti-CEA T84.66 antibody and uses thereof	7,273,608	9/25/2007
Humanized anti-CEA T84.66 antibody and uses thereof	7,776,330	8/17/2010

## <u>CONTACT</u>

Matthew Grunseth, M.B.S. Senior Manager, Office of Technology Licensing Telephone: (626) 471-7221 | Email: mgrunseth@coh.org

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