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# Anti-CD40 Monoclonal Antibody SEA-CD40

National Cancer Institute

## Source

National Cancer Institute. *Anti-CD40 Monoclonal Antibody SEA-CD40*. NCI Thesaurus. Code C121217.

A proprietary, non-fucosylated monoclonal antibody directed against the cell surface receptor CD40 with potential immunostimulatory and antineoplastic activities. Upon intravenous administration, anti-CD40 monoclonal antibody SEA-CD40 binds to CD40 on a variety of immune cell types, triggering both cellular proliferation and activation of antigen-presenting cells (APCs), which activates B-cells and T-cells, and enhances the immune response against tumor cells. In addition, this agent binds to the CD40 antigen present on the surfaces of tumor cells, which induces antibody-dependent cytotoxicity (ADCC), and eventually inhibits the proliferation of CD40-expressing tumor cells. CD40, a stimulatory receptor and a member of the tumor necrosis factor (TNF) receptor superfamily, is expressed on various immune cells, such as macrophages, dendritic cells and various tumor cell types; it plays a key role in the activation of the immune system. The non-fucosylated antibody shows increased efficacy as compared to its fucosylated counterpart.