AdipoGen® LIFE SCIENCES

PRODUCT DATA SHEET

AG-20B-0036 15-Oct-2010

anti-CD40 (mouse), mAb (FGK45)

[Tumor Necrosis Factor Receptor Superfamily Member 5; CD40L Receptor]

AG-20B-0036-C100	100 µg
AG-20B-0036-C500	500 µg

Clone	FGK45
Source/Host	Purified from concentrated hybridoma tissue culture supernatant.
Isotype	Rat IgG2a
Immunogen	Recombinant mouse CD40 fusion protein.

Handling / Storage

Shipping	BLUE ICE
Short Term Storage	+4°C
Long Term Storage	-20°C

After opening, prepare aliquots and store at -20°C. Avoid freeze/thaw cycles.

Use / Stability

Stable for at least 1 year after receipt when stored at -20°C.

MSDS available at www.adipogen.com or upon request.

Product Specifications

Specificity	Recognizes mouse CD40.
Species Crossreactivity	Mouse
Application	**Flow Cytometry** **Functional Application:** Activates B and NK cells *in vivo* and *in vitro*. For *in vivo* studies use the preservative free antibody (Prod. No. AG-20B-0036PF).
Purity	≥95% (SDS-PAGE)
Formulation	Liquid. In PBS containing 0.02% sodium azide.
Concentration	1mg/ml
Endotoxin Content	<0.01EU/µg purified protein (LAL test; Lonza).
Isotype Negative Control	Rat IgG2a Isotype Control

Other Product Data

Widely used stimulatory MAb to CD40. Shown to indirectly activate natural killer (NK) cells, producing significant antitumor and antimetastatic effects. Effective in boosting immune responses against infectious agents and can potentially be used to treat chronic autoimmune inflammatory processes.

North/South America:
Adipogen Corp.
9853 Pacific Heights Blvd., Suite L
San Diego, CA 92121-4721
USA
TEL (858) 457-8383
FAX (858) 457-8484
info-us@adipogen.com

Rest of World:
Adipogen AG
Schützenstrasse 12
4410 Liestal
Switzerland
TEL +41-61-926-60-40
FAX +41-61-926-60-49
info@adipogen.com

For Local Distributors please visit
www.adipogen.com

AdipoGen®
LIFE SCIENCES

PRODUCT DATA SHEET

Product Description

CD40 belongs to the TNF-receptor superfamily and is essential in mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. The interaction of CD40-CD40L is necessary for amyloid-beta-induced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis. CD40 is constitutively expressed by antigen presenting cells, including dendritic cells, B cells and macrophages. Consistent with its widespread expression on normal cells, CD40 is also expressed on a wide range of tumor cells, including non-Hodgkin's and Hodgkin's lymphomas, myeloma and some carcinomas including nasopharynx, bladder, cervix, kidney and ovary.

Product Specific References

1. The SCID but not the RAG-2 gene product is required for S mu-S epsilon heavy chain class switching: A. Rolink, et al.; Immunity **5,** 319 (1996)
2. Characterization of immature B cells by a novel monoclonal antibody, by turnover and by mitogen reactivity: A.G. Rolink, et al.; Eur. J. Immunol. **28,** 3738 (1998)
3. Anti-CD40 antibody induces antitumor and antimetastatic effects: the role of NK cells: J.G. Turner, et al.; J. Immunol. **166,** 89 (2001)
4. Therapeutic activity of agonistic monoclonal antibodies against CD40 in a chronic autoimmune inflammatory process: C. Mauri, et al.; Nat. Med. **6,** 673 (2000)
5. Ovarian insufficiency and early pregnancy loss induced by activation of the innate immune system: A. Erlebacher, et al.; J. Clin. Invest. **114,** 39 (2004)
6. CD154 is a negative regulator of autoaggressive CD8+ T cells in type 1 diabetes: C.M. McGregor, et al.; PNAS **101,** 9345 (2004)
7. IRF-7 is the master regulator of type-I interferon-dependent immune responses: K. Honda, et al.; Nature **434,** 772 (2005)
8. In vivo and in vitro regulation of type I IFN synthesis by synergistic effects of CD40 and type II IFN: J.A. Greene, et al.; J. Immunol. **176,** 5995 (2006)
9. IL-10- and IL-12-independent down-regulation of allergic sensitization by stimulation of CD40 signaling: P.W. Hellings, et al.; J. Immunol. **177,** 5138 (2006)
10. Agonistic Anti-CD40 Antibody Profoundly Suppresses the Immune Response to Infection with Lymphocytic Choriomeningitis Virus: C. Bartholdy, et al.; J. Immunol. **178,** 1662 (2007)
11. Excessive interferon-α signaling in autoimmunity alters glycosphingolipid processing in B cells: A. Hee-Meng Tan, et al.; J. Autoimmun. in press (2017)

North/South America:
Adipogen Corp.
9853 Pacific Heights Blvd., Suite L
San Diego, CA 92121-4721
USA
TEL (858) 457-8383
FAX (858) 457-8484
info-us@adipogen.com

Rest of World:
Adipogen AG
Schützenstrasse 12
4410 Liestal
Switzerland
TEL +41-61-926-60-40
FAX +41-61-926-60-49
info@adipogen.com

For Local Distributors please visit
www.adipogen.com