Leinco Technologies, Inc.
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Anti-Mouse CD27 (Clone RM27-3E5) - Recombinant *in vivo* Functional Grade

Recombinant Monoclonal Antibody for In Vivo Use

Product Information

Product No.:	C3233
Clone:	RM27-3E5
Isotype:	Rat IgG2a κ

Product Description

Background:
CD27 is a glycosylated, type I transmembrane protein of the TNFR superfamily that is constitutively expressed on the surface of progenitor and naïve T cells as well as subsets of natural killer (NK) and B cells[1,2]. CD27 is an immune-checkpoint receptor and ligation with CD70 results in co-stimulatory effects that enhance primary, memory, and recall T cell responses. CD27 signaling has been targeted for the development of viral, autoimmune, and anti-tumor immunotherapies[2].

RM27-3E5 (rat IgG2a) was raised against recombinant mouse CD27-human IgG1 Fc fusion protein and purified from ascites using protein G columns[3,4]. RM27-3E5 enhances anti-CD3-stimulated T cell proliferation when immobilized *in vitro* and augments ovalbumin-specific cytotoxic T lymphocyte (CTL) induction when administered *in vivo*[3].

RM27-3E5 is an agonistic antibody[3] and has been found to support the control of both established lung metastases and subcutaneous tumors[5]. An anti-tumor effect was also observed with RM27-3E5 against EG7/CD27(+) and EG7/CD27(−) tumors[4], with the effect mediated mainly by T cells with a minor contribution by NK cells. RM27-3E5 exerts its potent anti-tumor effect by inducing a tumor-specific CTL response. RM27-3E5 has potential utility as a non-depleting agonistic anti-CD27 mAb to enhance anti-tumor immunity[4].

Known Reactivity Species:
Mouse

Expression Host:
HEK-293 Cells

Format:
Purified No Carrier Protein

Immunogen:
Mouse CD27-human IgG1 Fc fusion protein

Formulation
This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity
≥95% by SDS Page, ≥95% monomer by analytical SEC

Endotoxin
< 1.0 EU/mg as determined by the LAL method

Storage and Stability
Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at ≤ -70°C. **Avoid Repeated Freeze Thaw Cycles.**

Product Preparation
Recombinant antibodies are manufactured in an animal free facility using only *in vitro* protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Pathogen Testing
To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's recombinant biosimilar antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Applications
Applications and Recommended Usage (Quality Tested By Leinco):

NA

Other Applications Reported in Literature:

IP,
FA,
FC

Country of Origin
USA

References
1. Camerini D, Walz G, Loenen WA, et al. J Immunol. 147(9):3165-3169. 1991.
2. Grant EJ, Nüssing S, Sant S, et al. Curr Opin Virol. 22:77-88. 2017.

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3. Sumi T, Ishida W, Ojima A, et al. Immunol Lett. 119(1-2):91-96. 2008.
4. Sakanishi T, Yagita H. Biochem Biophys Res Commun. 393(4):829-835. 2010.
5. Roberts DJ, Franklin NA, Kingeter LM, et al. J Immunother. 33(8):769-779. 2010.

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