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Background: CD80 (B7-1) and CD86 (B7-2) are ligands of T cell critical costimulatory molecule CD28 and of an inhibitory receptor CTLA-4 (CD152). The both B7 molecules are expressed on professional antigen-presenting cells and are essential for T cell activation, the both molecules can also substitute for each other in this process. The question what are the differences in CD80 and CD86 competency has not been fully elucidated yet; there are still conflicts in results about their respective roles in initiation or sustaining of the T cell immune response.

Uniprot ID:	<u>P33681</u>
NCBI:	<u>NP_005182.1</u>
GenelD:	<u>941</u>
Host / Isotype:	Mouse / IgG1
Clone:	MEM-233
Immunogen:	CD80 fusion protein
Format:	 State: Liquid purified Ig fraction Buffer System: PBS containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free BSA as a stabilizer Label: FITC – Fluorescein isothiocyanate The reagent is free of unconjugated and adjusted for direct use
Applications:	Flow cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10e6 cells in a suspension. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody reacts with CD80. Species: Human. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Shelf life: one year from despatch.
Product Citation:	1. Jewon Ryu, Cheol-Whan Lee, Kyung-Hee Hong, Jin-Ae Shin, Sun-Hee Lim, Chan-Sik Park, Jiyeon Shim, Ki Byung Nam, Kee-Joon Choi, You-Ho Kim, and Ki Hoon Han Activation of

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SM1742F: Monoclonal Antibody to CD80 - FITC

fractalkine/CX3CR1 by vascular endothelial cells induces angiogenesis through VEGF-A/KDR and reverses hindlimb ischaemia Cardiovasc Res, May 2008; 78: 333 - 340.

General References: 1. Vasilevko V, Ghochikyan A, Holterman MJ, Agadjanyan MG: CD80 (B7-1) and CD86 (B7-2) are functionally equivalent in the initiation and maintenance of CD4+ T-cell proliferation

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