

Recombinant Mouse Card9 Protein, Myc/DDK-tagged

Cat. No. Card9-1964M **Lot. No.** (See product label)

SPECIFICATION

Product Overview Purified recombinant protein of mouse full-length caspase recruitment domain family, member 9 (Card9), with C-terminal MYC/DDK tag, expressed in HEK293T cells.

Species Mouse

Source HEK293

Description Adapter protein that plays a key role in innate immune response to a number of intracellular pathogens, such as *C.albicans* and *L.monocytogenes*. Is at the crossroads of ITAM-tyrosine kinase and the Toll-like receptors (TLR) and NOD2 signaling pathways. Probably controls various innate immune response pathways depending on the intracellular pathogen. Controls CLEC7A (dectin-1)-mediated myeloid cell activation induced by the yeast cell wall component zymosan, leading to cytokine production and innate anti-fungal immunity: acts by regulating BCL10-MALT1-mediated NF-kappa-B activation pathway. Activates NF-kappa-B via BCL10. In response to the hyphal form of *C.albicans*, mediates CLEC6A (dectin-2)-induced I-kappa-B kinase ubiquitination, leading to NF-kappa-B activation via interaction with BCL10. In response to *L.monocytogenes* infection, acts by connecting NOD2 recognition of peptidoglycan to downstream activation of MAP kinases (MAPK) without activating NF-kappa-B. In response to fungal infection, may be required for the development and subsequent differentiation of interleukin 17-producing T helper (TH-17) cells. Also involved in activation of myeloid cells via classical ITAM-associated receptors and TLR: required for TLR-mediated activation of MAPK, while it is not required for TLR-induced activation of NF-kappa-B.

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Molecular Mass	62.5 kDa
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade after receiving vials.
Concentration	>50 µg/mL as determined by microplate BCA method
Storage Buffer	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.

GENE INFORMATION

Gene Name	Card9 caspase recruitment domain family, member 9 [Mus musculus (house mouse)]
Official Symbol	Card9
Synonyms	CARD9; caspase recruitment domain family, member 9; caspase recruitment domain-containing protein 9; Gm782; RP23-306D20.2
Gene ID	332579
mRNA Refseq	NM_001037747
Protein Refseq	NP_001032836
UniProt ID	A2AIV8

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