



Mouse Anti-DKK2 monoclonal antibody, clone 6G9 (CABT-RM119)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Specifically detects human Dickkopf-related protein 2. It targets an epitope with in 15 amino acids from the N-terminal region.
Target	Anti-DKK2
Immunogen	KLH-conjugated linear peptide corresponding to 15 amino acids from the N-terminal region of human Dickkopf-2 protein.
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	6G9
Purification	Protein G purified
Conjugate	unconjugated
Applications	ELISA, FuncS, WB
Molecular Weight	~38 kDa observed; 28.45 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 µl
Buffer	PBS

Preservative	None
Storage	Stable for 1 year at -20°C from date of receipt. Handling Recommendations: Upon receipt and prior to removing the cap, centrifuge the vial and gently mix the solution. Aliquot into microcentrifuge tubes and store at -20°C. Avoid repeated freeze/thaw cycles, which may damage IgG and affect product performance.

BACKGROUND

Introduction	Dickkopf-related protein 2 is encoded by the DKK2 gene in human. DKK2 is a member of the Dickkopf family that is expressed in heart, brain, skeletal muscle, and lung. It is synthesized with a signal peptide (aa 1-33) that is subsequently cleaved off in the mature form. DKK2 is reported to antagonize canonical Wnt signaling by inhibiting LRP5/6 interaction with Wnt and by forming a ternary complex with the transmembrane protein KREMEN that promotes internalization of LRP5/6. Its C-terminal cysteine-rich domain mediates its interaction with LRP5 and LRP6. It plays an important role in vertebrate development, where it locally inhibits Wnt regulated processes such as antero-posterior axial patterning, limb development, somitogenesis and eye formation. DKK2 secreted by tumor cells is shown to act on cytotoxic lymphocytes and inhibit STAT5 signaling by blocking STAT5 nuclear localization via LRP5, independent of LRP6. Loss of DKK2 is reported to activate natural killer (NK) cells and CD8+ T cells in tumors that can delay tumor progression and enhance the effects of PD-1 blockade.
Keywords	DKK2; dickkopf 2 homolog (Xenopus laevis); dickkopf (Xenopus laevis) homolog 2; dickkopf-related protein 2; hDkk-2; dickkopf-2; dickkopf homolog 2; dickkopf related protein-2; DKK-2

GENE INFORMATION

Entrez Gene ID	27123
UniProt ID	Q9UBU2