

IL-6 (D3K2N) Rabbit mAb

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Applications: W, W-S, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 21-28	Source/Isotype: Rabbit IgG	UniProt ID: #P05231	Entrez-Gene Id: 3569
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Product Usage Information**Application**

Western Blotting
Simple Western™
Immunoprecipitation

Dilution

1:1000
1:10 - 1:50
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

IL-6 (D3K2N) Rabbit mAb recognizes endogenous levels of total IL-6 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a recombinant human IL-6 protein.

Background

Acute phase response is induced by interleukin-6 (IL-6) produced by T cells, macrophages, fibroblasts, endothelial and other cells (1,2). IL-6 induces proliferation or differentiation in many cell types including B cells, thymocytes and T cells. IL-6, in concert with TGF-β, is important for developing Th17 responses. IL-6 binds to IL-6Rα and through this association induces gp130 homodimerization (1). gp130 homodimerization triggers the Jak/Stat cascade and the SHP-2/Erk MAP kinase cascade (1,3,4). IL-6 also forms a complex with an IL-6Rα splice variant that is non-membrane-associated (3). The IL-6/soluble IL-6Rα complex can then activate the gp130 signaling pathway in cells that express gp130 but not IL-6Rα (3). Research studies have shown that IL-6, through increasing expression of proangiogenic VEGF, may also contribute to metastatic breast cancer (5).

Background References

1. Heinrich, P.C. et al. (1998) *Biochem J* 334 (Pt 2), 297-314.
2. Heinrich, P.C. et al. (1998) *Z Ernährungswiss* 37 Suppl 1, 43-9.
3. Jones, S.A. (2005) *J Immunol* 175, 3463-8.
4. Jenkins, B.J. et al. (2004) *Mol Cell Biol* 24, 1453-63.
5. Hong, D.S. et al. (2007) *Cancer* 110, 1911-28.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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