

Mouse Anti-IL-6R α /CD126 [MD413]: MC0679

Intended Use: For Research Use Only

Description: Interleukin 6 receptor (IL-6R) is a heterodimeric complex that consists of a ligand-binding subunit IL-6R α (CD126) and a signal transducer IL-6R β (IL-6ST/gp130). IL-6 is a potent pleiotropic cytokine that regulates cell growth and differentiation and plays an important role in the immune response. Binding of IL-6 to IL-6R α results in receptor dimerization with gp130 and subsequent STAT3 activation. IL-6R α is cleaved from the cell surface by ADAM17. In humans, soluble IL-6R α is also generated via alternatively spliced mRNA. Soluble IL-6R α binding to IL-6 can stimulate signaling via membrane bound gp130 in the trans-signaling process. Dysregulated production of IL-6 and this receptor are implicated in the pathogenesis of many diseases, such as multiple myeloma, autoimmune diseases and prostate cancer.

Specifications

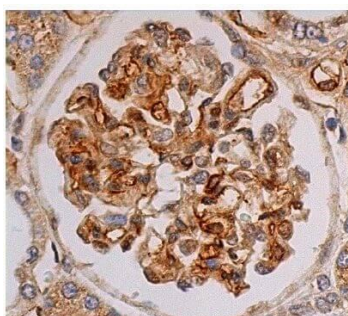
Clone:	MD413
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human, mouse, rat
Immunogen:	Human IL-6 Receptor alpha epitope aa 441-468 at the C-terminus
Localization:	Membrane, cytoplasm, secreted
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, IF, IP, WB
Package:	

Description	Catalog No.	Size
IL-6R α /CD126 Concentrated	MC0679	1 ml

IHC Procedure

Positive Control Tissue:	Kidney, fetal skeletal muscle tissue
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human kidney stained with anti-IL-6R α using DAB

References:

1. Dual STAT-3 and IL-6R inhibition with stattic and tocilizumab decreases migration, invasion and proliferation of prostate cancer cells by targeting the IL-6/IL-6R/STAT-3 axis. Méndez-Clemente, A. et al. Oncol Rep. 48, 2022.
2. SSTP1, a Host Defense Peptide, Exploits the Immunomodulatory IL6 Pathway to Induce Apoptosis in Cancer Cells. Gopalakrishnan, S. et al. 2021. Front Immunol. 12: 740620, 2021.
3. Mesenchymal stem/stromal cells-derived IL-6 promotes nasopharyngeal carcinoma growth and resistance to cisplatin via upregulating CD73 expression. J Cancer. 11: 2068-2079, 2020.

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