

Interleukin-6 receptor subunit alpha Antibody

Mouse Monoclonal Antibody [Clone IL6R/12586]

Catalog No	Format	Size
3570-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3570-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3570-MSM1-P1ABX	Purified Ab WITHOUT BSA or Azide at 1.0mg/ml	100 ug

Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	IL6R/12586
Immunogen	Recombinant human IL6R protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	51.55kDa
Cellular Localization	Cell membrane, Secreted
Species Reactivity	Human
Positive Control	Expressed in peripheral blood mononuclear cells and weakly found in urine and serum

*Optimal dilution for a specific application should be determined.

Product Images for Interleukin-6 receptor subunit alpha Antibody

Specificity & Comments

Part of the receptor for interleukin 6. Binds to IL6 with low affinity, but does not transduce a signal (PubMed:28265003). Signal activation necessitate an association with IL6ST. Activation leads to the regulation of the immune response, acute-phase reactions and hematopoiesis (PubMed:30995492, PubMed:31235509). The interaction with membrane-bound IL6R and IL6ST stimulates 'classic signaling', the restricted expression of the IL6R limits classic IL6 signaling to only a few tissues such as the liver and some cells of the immune system. Whereas the binding of IL6 and soluble IL6R to IL6ST stimulates 'trans-signaling'. Alternatively, 'cluster signaling' occurs when membrane-bound IL6:IL6R complexes on transmitter cells activate IL6ST receptors on neighboring receiver cells (Probable)., Signaling via the membrane-bound IL6R is mostly regenerative and anti-inflammatory (Probable). Drives naive CD4(+) T cells to the Th17 lineage, through 'cluster signaling' by dendritic cells (By similarity)., Soluble form of IL6 receptor (sIL6R) that acts as an agonist of IL6 activity (PubMed:21990364). The IL6:sIL6R complex (hyper-IL6) binds to IL6ST/gp130 on cell surfaces and induces signaling also on cells that do not express membrane-bound IL6R in a process called IL6 'trans-signaling'. sIL6R is causative for the pro-inflammatory properties of IL6 and an important player in the development of chronic inflammatory diseases (PubMed:21990364). In complex with IL6, is required for induction of VEGF production (PubMed:12794819). Plays a protective role during liver injury, being required for maintenance of tissue regeneration (By similarity). 'Trans-signaling' in central nervous system regulates energy and glucose homeostasis (By similarity).

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.