CD126 Monoclonal Antibody (B-R6), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	B-R6
Conjugate	Unconjugated
Immunogen	Rec. Human IL-6R (CD126)
Form	Liquid
Concentration	0.1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS
Contains	no preservative
Storage conditions	4° C
RRID	AB_10598676

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	Assay-Dependent	-
ELISA (ELISA)	-	1 Publication
Neutralization (Neu)	-	3 Publications
Functional Assay (FN)	Assay-Dependent	-
Inhibition Assays (IA)	-	1 Publication

Product Specific Information

Description: Recognizes soluble and membranous human IL-6R. This Antibody has been shown to inhibit IL-6 mediated proliferation of XG-1 cells, and partially blocks binding of IL-6 to its receptor. BMS135 is applicable for FACS analysis

IL-6 is a multifunctional cytokine involved in the regulation of the immune response, hematopoiesis and acute phase response. It has been recognized to be a member of the alpha-helical cytokine family. IL-6 exerts its action via a cell surface receptor which consists of two subunits, an 80 kDa ligand binding subunit (gp80) of 468 amino acids and a 130 kDa signal transducing protein (gp130) of 896 amino acid residues. Characterisation of the extracellular portion of the 80 kDa IL-6 receptor revealed the existence of a single immunoglobulin-like domain in the NH2-terminal of the extracellular region, which does not contribute to ligand binding. The remainder of the extracellular domain however is essential for low affinity ligand binding, which consecutively triggers the association of the receptor and gp130 thus forming a high affinity binding site for IL-6.

A soluble form of the human gp80 protein has been detected in serum and urine samples. This 55 kDa protein representing the extracellular portion of gp80 is generated by shedding, a process that seems to be controlled by protein kinase C. It is still functional, indicating that soluble gp80 plays a biological role in promoting IL-6 activity. So far, the soluble IL-6 receptor is unique in acting as an agonist together with its ligand.

Applications Tested: Flow Cytometry, Functional Studies (Blocking).

Purity: >95%.

5 References

ELISA (1)

Scientific reports

A new strategy to deliver synthetic protein drugs: self-reproducible biologics using minicircles.

"BMS135 was used in an ELISA assay to develop a novel strategy to allow the production of synthetic drugs in vivo by the host itself."

Authors: Yi H,Kim Y,Kim J,Jung H,Rim YA,Jung SM,Park SH,Ju JH

Year
2014

Species
Human

Neutralization (3)

Cell death & disease

Secreted KIAA1199 promotes the progression of rheumatoid arthritis by mediating hyaluronic acid degradation in an ANXA1-dependent manner.

"Published figure using CD126 monoclonal antibody (Product # BMS135) in Neutralization"

Authors: Zhang W,Yin G,Zhao H,Ling H,Xie Z,Xiao C,Chen Y,Lin Y,Jiang T,Jin S,Wang J,Yang X

Year
2021

Species
Human

Cellular and molecular gastroenterology and hepatology

Crohn's Disease Fibroblasts Overproduce the Novel Protein KIAA1199 to Create Proinflammatory Hyaluronan Fragments.

"BMS135 was used in Blocking experiments to test the hypothesis that KIAA1199 protein is increased in Crohn"s Disease colon fibroblasts, and generates hyaluronan fragments that foster inflammation and fibrosis."

Authors: Soroosh A,Albeiroti S,West GA,Willard B,Fiocchi C,de la Motte CA

Year
2016

Species
Human

View more Neu references on thermofisher.com

Inhibition Assays (1)

Cell death & disease

Secreted KIAA1199 promotes the progression of rheumatoid arthritis by mediating hyaluronic acid degradation in an ANXA1-dependent manner.

"Published figure using CD126 monoclonal antibody (Product # BMS135) in Neutralization"

Authors: Zhang W,Yin G,Zhao H,Ling H,Xie Z,Xiao C,Chen Y,Lin Y,Jiang T,Jin S,Wang J,Yang X

Year
2021

Species
Human

More applications with references on thermofisher.com