abcam

ab89336

Anti-IL-8 antibody [MM0219-7F11]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human CXCL8. Database link P10145
Carrier free	Yes
Clone number	MM0219-7F11
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	The IgG fraction of culture supernatant was purified by Protein G affinity chromatography and lyophilized from a 0.2 µm filtered solution.

Reactivity data

Flow Cyt

Expected

Species	Human
Dilution info	-

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

WB

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

FuncS (Neut/Block)

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-Fr

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CXCL8

Function	Chemotactic factor that mediates inflammatory response by attracting neutrophils, basophils, and T-cells to clear pathogens and protect the host from infection (PubMed:18692776, PubMed:7636208). Also plays an important role in neutrophil activation (PubMed:2145175, PubMed:9623510). Released in response to an inflammatory stimulus, exerts its effect by binding to the G-protein-coupled receptors CXCR1 and CXCR2, primarily found in neutrophils, monocytes and endothelial cells (PubMed:1840701, PubMed:1891716). G-protein heterotrimer (alpha, beta, gamma subunits) constitutively binds to CXCR1/CXCR2 receptor and activation by IL8 leads to beta and gamma subunits release from Galpha (GNAI2 in neutrophils) and activation of several downstream signaling pathways including PI3K and MAPK pathways (PubMed:11971003, PubMed:8662698).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	IL-8 also known as CXCL8 is a cytokine with a molecular weight of approximately 8 kDa. It belongs to the CXC chemokine family and plays a role in the recruitment of neutrophils to sites of inflammation. Cells like monocytes macrophages and endothelial cells express IL-8 after activation by pro-inflammatory signals. The protein exhibits high expression in cells associated with the immune response and inflammation serving as a signaling molecule between these cell types.
Biological function summary	IL-8 functions as a chemoattractant for neutrophils and lymphocytes facilitating their movement towards the site of infection or injury. It does not form part of a larger protein complex but operates individually to enhance immune cell migration. IL-8 possesses unique binding motifs allowing it to interact with specific receptors namely CXCR1 and CXCR2 on target cells. This binding triggers cellular responses leading to effective immune surveillance and response to inflammatory stimuli.
Pathways	IL-8 operates within important inflammatory and immune response pathways. It forms a part of the NF-κB signaling cascade which activates in response to stress signals promoting the expression of other inflammatory mediators. Additionally it engages in the mitogen-activated protein kinase (MAPK) pathway influencing cellular responses such as proliferation and differentiation. The interaction of IL-8

	with these pathways highlights its role in modulating immune responses and highlights its interaction with other proteins such as TNF-α and IL-1β.
Associated diseases and disorders	IL-8 shows a strong association with conditions like rheumatoid arthritis and chronic obstructive pulmonary disease (COPD). It acts as a biomarker for these diseases often correlating with disease severity and inflammation levels. In rheumatoid arthritis IL-8 contributes to joint inflammation and degradation while in COPD it enhances airway inflammation and tissue damage. The cytokine's involvement in these diseases connects it with other inflammatory mediators such as MMPs and leukotrienes which collectively exacerbate disease pathology.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

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