

DATASHEET

Version: 2016-08-17

IL-8 Antibody (4H7C7), mAb, Mouse**Cat. No.:** A01606-40**Size:** 40 µg**Synonyms:** IL-8 Antibody, mAb, Mouse;**Description:**

IL-8 is a member of the CXC chemokine family. This family of small basic heparan-binding proteins is proinflammatory and primarily mediates the activation and migration of neutrophils from peripheral blood into tissue. This chemokine is one of the major mediators of the inflammatory response and is secreted by several cell types in response to an inflammatory stimulus. It functions as a chemoattractant, and is also a potent angiogenic factor. IL-8 attracts neutrophils, basophils, and T-cells, but not monocytes. Cystic fibrosis (CF) is characterized by severe lung inflammation. The inflammatory process is believed to be caused by massive overproduction of the proinflammatory protein IL-8, and the high levels of IL8 in the CF lung are therefore believed to be the central mechanism behind CF lung pathophysiology.

GenScript **Human IL-8 Antibody (4H7C7), mAb, Mouse** was raised by a genetic immunization technique. Genetic immunization can be used to generate antibodies by directly delivering antigen-coding DNA into the animal, rather than injecting a protein or peptide (Tang et al. PubMed: 1545867; Chambers and Johnston PubMed 12910245; Barry and Johnston PubMed: 9234514). The animals cells produce the protein, which stimulates the animals immune system to produce antibodies against that particular protein.

A vector coding for a partial fusion protein was used for genetic immunisation of a mouse and the resulting serum was tested in Western blot against an E.coli lysate containing that partial fusion protein. Genetic immunization offers enormous advantages over the traditional protein-based immunization method. DNA is faster, cheaper, and easier to produce and can be produced by standard techniques readily amenable to automation. Furthermore, the antibodies generated by genetic immunization are usually of superior quality with regard to specificity, affinity, and native protein recognition.

Immunogen: Genetic immunization, amino acids sequence: MTSKLAVALL AAFLLISAALC EGAVLPRSAK ELRCQCIKTY

SKPFHPKFIK ELRVIESGPH CANTEIIVKL SDGRELCCLDP
KENWVQRVVE KELKRAENS

Host: Mouse**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Fusion Partner:**

Spleen cells were fused with SP2/0-Ag14 mouse myeloma cells.

Predicated Band Size:

36 KD

Observed Band Size:

36 KD

Formulation:

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide

Clone: 4H7C7**Ig Subclass:** IgG1, κ

Specificity: GenScript **Human IL-8 Antibody (4H7C7), mAb, Mouse** detects human IL-8 and does not cross-react with IL-1α, IL-1β, IL-4, IL-6, and IL-18.

Purification: Protein A affinity column**Applications:**

Western blot: 0.1–1 µg/ml

Other applications: user-optimized

Species Reactivity: Human. Reactivity to other species is not tested yet.

Reconstitution:

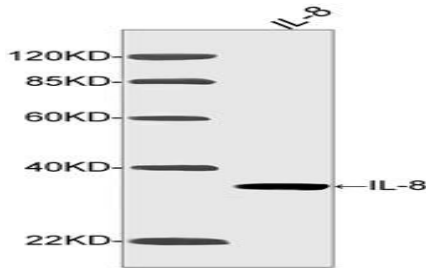
Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody concentration of 0.5 mg/ml.

Storage:

The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or

below. Avoid repeated freezing and thawing cycles.

Example

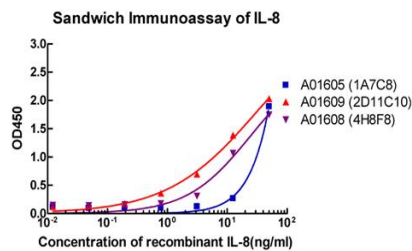


Western blot analysis of human recombinant IL-8 fusion protein using Human IL-8 Antibody (4H7C7), mAb, Mouse (GenScript, A01606, 1 µg/ml)

The signal was developed with IRDye™ 800 Conjugated Goat Anti-Mouse IgG.

Predicted Size: 36 KD

Observed Size: 36 KD



Sandwich ELISA analysis of matched antibody pairs using Human IL-8 Antibody, mAb, Mouse

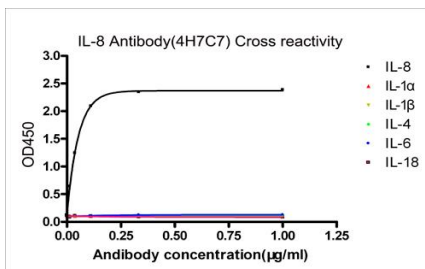
1. ELISA plate is coated with Human IL-8 Antibody, mAb, Mouse (Cat. No. A01606 (4H7C7)).

2. Human recombinant IL-8 protein at appropriate dilution is added into appropriate reaction wells.

3. After a period of incubation, HRP conjugated Human IL-8 Antibody, mAb, Mouse (Clone. 1A7C8, 2D11C10 or 4H8F8) is added followed by proper period of incubation.

4. TMB substrate is added and developed at room temperature.

5. Stop the reaction with 1.0 N HCl and read the plate at 450nm.



ELISA analysis of Cross reactivity using Human IL-8 Antibody (1A7C8), mAb, Mouse (GenScript, A01605)