

**Mouse Anti-Parainfluenza Virus 1 [M2110189]: MC0198**

**Intended Use:** For Research Use Only

**Description:** Human parainfluenza viruses, which belong to the paramyxovirus family, are pleomorphic viruses whose envelope is derived from the last host cell they infected. They comprise a group of four distinct serotypes of single-stranded RNA viruses. Human parainfluenza virus type 1 is the most common cause of croup and other upper and lower respiratory tract illnesses. Human parainfluenza virus type 2 infections usually follow type 1 infections and also cause croup and other upper and lower respiratory tract illnesses, and may cause aseptic meningitis and parotitis. Human parainfluenza virus type 2 forms filamentous particles in virus-infected, polarized epithelial cells. Human parainfluenza virus type 3 infections are associated with pneumonia as well as bronchiolitis and typically last longer than type 1 and 2 infections. Human parainfluenza virus type 4, one of the rubulaviruses, has a V protein with a highly conserved cysteine-rich domain characteristic of paramyxovirus V proteins. It is the only paramyxovirus that cannot evade the IFN-induced antiviral responses.

**Specifications**

Clone: M2110189  
 Source: Mouse  
 Isotype: IgG2b  
 Reactivity: Parainfluenza virus, type 1  
 Immunogen: Parainfluenza virus, type 1  
 Localization: Nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, ICC/IF  
 Package:

Description	Catalog No.	Size
Parainfluenza Virus 1 Concentrated	MC0198	1 ml

**IHC Procedure\***

Positive Control Tissue: Parainfluenza virus type 1 infected tissues  
 Concentrated Dilution: 10-50  
 Pretreatment: None  
 Incubation Time and Temp: Overnight @ 4°C  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. An influenza virus-triggered SUMO switch orchestrates co-opted endogenous retroviruses to stimulate host antiviral immunity. Schmidt N, et al. Proc Natl Acad Sci U S A 116:17399-17408, 2019.
2. Pneumonia Caused by Coronavirus 229E and Parainfluenza 3 Coinfection in a Lung Transplant Recipient. Gonzales Zamora, J. A. Infectious Diseases in Clinical Practice, 26(1), e3–e4, 2018.
3. Attenuated Human Parainfluenza Virus Type 1 Expressing Ebola Virus Glycoprotein GP Administered Intranasally Is Immunogenic in African Green Monkeys. Lingemann M, et al. J Virol 91:N/A, 2017.
4. Parainfluenza Virus Infection. Branche AR, et al. Semin Respir Crit Care Med. 37(4):538-554, 2016.
5. The Role of Human Parainfluenza Virus Infections in the Immunopathology of the Respiratory Tract. Pawelczyk M, et al. Curr Allergy Asthma Rep. ;17(3):16, 2017.
6. Interaction between the hemagglutinin-neuraminidase and fusion glycoproteins of human parainfluenza virus type III regulates viral growth in vivo. Xu R, et al. mBio. 4(5):e00803-e813, 2013.