

## anti- *Legionella pneumophila* antibody, rabbit polyclonal

64-101 100 µg

**Shipping and Storage:** Shipped at 4°C or -20°C. Store at -20°C. Avoid repeated freeze-thaw cycles.

**Immunogen:** Formaldehyde treated whole cells of *Legionella pneumophila* strain Philadelphia 1 (ATCC #33152). Immunized 7 times at two weeks intervals.

**Form:** 1.0 mg/ml in PBS- with 50% glycerol. Filter sterilized. Azide and carrier protein-free.

**Reactivity:** Reacts with *Legionella pneumophila* strains. Since the antiserum has not been adsorbed, it may cross-reacts with related bacteria.

### Applications

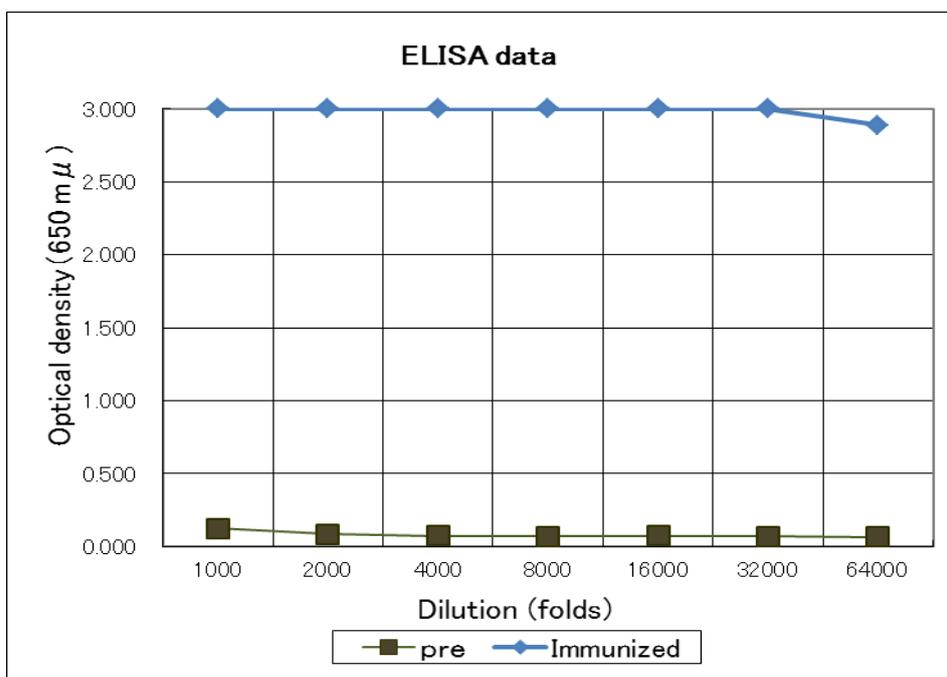
- 1) Immunofluorescent and Immunochemical staining (1/10,000 ~1/30,000 dilution)
- 2) Immunohistochemistry (1/3,000~1/10,000)
- 3) ELISA (1/10,000~1/30,000 dilution)
- 4) Agglutination (1/2,000~1/5,000)

**Background:** Legionnaires disease (LD) was recognized in 1976 after an outbreak of pneumonia at an American Legion convention in Philadelphia. Soon after, the etiologic agent was identified as a fastidious gram-negative bacillus and named *Legionella pneumophila*. Although several other species of the genus *Legionella* were subsequently identified, *L pneumophila* is the most frequent cause of human legionellosis and a relatively common cause of community-acquired and nosocomial pneumonia in adults. In children, *L pneumophila* is also an important, although relatively uncommon, cause of pneumonia.



**Fig.1 Immunofluorescent staining of Legionella pneumophila in the infected HEK293 cells using anti-Legionella pneumophila antibody.**

HEK293 cells were infected with Legionella pneumophila strain Philadelphia1 fixed with 4% formaldehyde and reacted with the anti-Legionella pneumophila antibody at 1/10,000 dilution. As the second antibody, goat Rodamine Red X conjugated anti-rabbit IgG antibody was used at 1/10,000 dilution. DNA was stained with Hoechst 33342 (center) and the images were merged with that of differential interference contrast microscope (right).



**Fig.2. Titration of antibody reactivity of anti-Legionella pneumophila antiserum by direct ELISA**

Plate was coated with 100 μl of 10<sup>9</sup> cells/ml per well and 100 μl of the antiserum at the indicated dilution was added to each well and incubated. After washing, goat anti-rabbit-IgG conjugated with HRP was added as 2<sup>nd</sup> antibody. Color was developed with TMB as substrate. “pre” is preimmune serum and “Immunized” is immunized serum.