



# TGE Virus (8001): sc-58061

## BACKGROUND

*Coronavirus* is a genus of animal virus that belongs to the family *Coronaviridae*. Coronaviruses are enveloped viruses with a positive-sense single-stranded RNA genome and a helical symmetry that resemble a crown when viewed under an electron microscope. Coronaviruses primarily infect the upper respiratory and gastrointestinal tract of mammals and birds. Transmissible Gastroenteritis (TGE) Virus, a coronavirus, causes an acute infection of the small intestine of the pig. The disease is rarely fatal in adult animals but can cause extensive mortality in the neonate and is characterized by profuse diarrhea and vomiting. The TGE Virus peplomer protein is involved in membrane fusion and mediates the binding of virions to the host cell receptor.

## REFERENCES

1. Garwes, D.J. 1988. Transmissible gastroenteritis. *Vet. Rec.* 122: 462-463.
2. Moxley, R.A. and Olson, L.R. 1989. Lesions of TGE Virus infection in experimentally inoculated pigs suckling immunized sows. *Am. J. Vet. Res.* 50: 708-716.
3. Berthon, P., Bernard, S., Salmon, H. and Binns, R.M. 1990. Kinetics of the *in vitro* antibody response to TGE Virus from pig mesenteric lymph node cells, using the ELISASPOT and ELISA tests. *J. Immunol. Methods* 131: 173-182.
4. Honda, E., Kanemaru, H., Dong, X.Y., Ikuma, M., Somura, Y., Shibata, I., Okazaki, K. and Kumagai, T. 1990. Analysis of properties of monoclonal antibodies to TGE Virus using TO-163 strain. *Zentralblatt Veterinarmedizin Reihe B* 37: 660-667.
5. Honda, E., Takahashi, H., Okazaki, K., Minetoma, T. and Kumagai, T. 1990. The multiplication of TGE viruses in several cell lines originated from porcine kidney and effects of trypsin on the growth of the viruses. *Nippon Juigaku Zasshi* 52: 217-224.
6. Honda, E., Takahashi, H., Okazaki, K. and Kumagai, T. 1990. Appearance of pH-dependent cell fusions by TGE Virus. *Nippon Juigaku Zasshi* 52: 839-841.
7. Woods, R.D., Pirtle, E.C., Sacks, J.M. and Gibbs, E.P. 1990. Serologic survey for TGE Virus neutralizing antibodies in selected feral and domestic swine sera in the southern United States. *J. Wildl. Dis.* 26: 420-422.
8. Bernard, S., Shirai, J., Lantier, I., Bottreau, E. and Aynaud, J.M. 1990. Lactogenic immunity to (TGE) of swine induced by the attenuated Nouzilly strain of TGE Virus: passive protection of piglets and detection of serum and milk antibody classes by ELISA. *Vet. Immunol. Immunopathol.* 24: 37-47.
9. Derbyshire, J.B. and Lesnick, C.E. 1990. The effect of interferon induction in newborn piglets on the humoral immune response to oral vaccination with TGE Virus. *Vet. Immunol. Immunopathol.* 24: 227-234.

## SOURCE

TGE Virus (8001) is a mouse monoclonal antibody raised against Transmissible Gastroenteritis Virus.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

TGE Virus (8001) is recommended for detection of Transmissible Gastroenteritis Virus by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.