

# TGE Virus (1-Q-17): sc-52436

## 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. Bernard, S., Shirai, J., Lantier, I., Böttreau, 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.
4. 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.
5. 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.
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8. 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.
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## SOURCE

TGE Virus (1-Q-17) 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 (1-Q-17) is recommended for detection of transmissible gastroenteritis virus by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)].

## SELECT PRODUCT CITATIONS

1. Du, J., Chen, D., Yu, B., He, J., Yu, J., Mao, X., Luo, Y., Zheng, P. and Luo, J. 2021. L-leucine promotes STAT1 and ISGs expression in TGEV-infected IPEC-J2 cells via mTOR activation. *Front. Immunol.* 12: 656573.

## 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.