

# Halofuginone, HRP conjugate

DAG1199

Lot. No. (See product label)

### PRODUCT INFORMATION

**Product overview** Halofuginone, HRP conjugate

Antigen Description Halofuginone is a coccidiostat used in veterinary medicine. It is a synthetic halogenated derivative of

febrifugine, a natural quinazolinone alkaloid which can be found in the Chinese herb Dichroa febrifuga. Halofuginone inhibits the development of T helper 17 cells, immune cells that play an important players in autoimmune disease, but it does not affect other kinds of T cells which involved in normal immune function. Halofuginone therefore has potential for the treatment of autoimmune disorders. Halofuginine is also an inhibitor of collagen type I gene expression and as a consequence it may

inhibit tumor cell growth.

**Source** Anti-Parasitic Drugs

Conjugate HRP

**Form** concentrate

Characteristic Each conjugate comprises antigen covalently bound to horseradish peroxide and is suitable as a

tracer in immunoassay development

#### **PACKAGING**

**Stability** This conjugate may be stored for up to 3 months at +2 - +8°C. For long term storage, aliquot and store

at -20°C. Avoid repeated freeze/thaw cycles. Avoid using azide containing buffers.

**Storage** Can be stored at 2-8°C for up to 3 months and at -20°C for longer term storage.

# **BACKGROUND**

Introduction Halofuginone is a coccidiostat used in veterinary medicine. It is a synthetic halogenated derivative of

febrifugine, a natural quinazolinone alkaloid which can be found in the Chinese herb Dichroa febrifuga. Collgard Biopharmaceuticals is developing halofuginone for the treatment of scleroderma and it has received orphan drug designation from the U.S. Food and Drug Administration. Halofuginone inhibits the development of T helper 17 cells, immune cells that play an important role in autoimmune disease, but it does not affect other kinds of T cells which involved in normal immune function. Halofuginone

therefore has potential for the treatment of autoimmune disorders.

**Keywords** Halofuginone; 7-Bromo-6-chloro-3-[3-[(2S,3R)-3-hydroxy-2-piperidinyl]-2-oxopropyl]-4-quinazolinone;

HAL; empostatin; rel-7-Bromo-6-chloro-3-[3-[(2R,3S)-3-hydroxy-2-piperidinyl]-2-oxopropyl]-4(3H)-

quinazolinone Hydrochloride

## **REFERENCES**

1. Sundrud, M. S.; Koralov, S. B.; Feuerer, M.; Calado, D. P.; Kozhaya, A. E.; Rhule-Smith, A.; Lefebvre, R. E.; Unutmaz, D. et al. (2009). 2. Keller et al (2012) Halofuginone and other febrifugine derivatives inhibit prolyl-trna synthetase. Nature Chemical Biology 12; 8(3):311-7.