

Datasheet: 6120-0004

Description:	SHEEP ANTI METHOTREXATE
Specificity:	METHOTREXATE
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.5 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

Target Species	Chemical
Product Form	Serum - liquid
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Immunogen	Methotrexate (4-amino-10-methylpteroyl-L-glutamic acid) conjugated via the carboxyl groups of the glutamic acid residue to KLH.
RRID	AB_619727

Specificity

Sheep anti methotrexate antibody recognizes Methotrexate, a drug originally manufactured as a chemotherapeutic agent for the treatment of a number of cancers. Methotrexate also acts as a disease-modifying anti-rheumatic drug used for the treatment of autoimmune conditions such as rheumatoid arthritis, Chron's disease and vasculitis.

Sheep anti methotrexate antibody exhibits the following cross reactivities with related compounds:-

Aminopterin	18%
Folic acid	<0.01%
Dyhydrofolic acid	<0.01%
Tetrahydrofolic acid	<0.01%
N-5-Methyltetrahydrofolic acid	<0.01%
Folinic acid	<0.01%
N-(p-Aminobenzoyl)-L-glutamic acid	<0.01%

References

1. Suzuki, Y. *et al.* (2003) The immunoassay of methotrexate by capillary electrophoresis with laser-induced fluorescence detection. [Anal Sci. 19 \(1\): 111-5.](#)
2. Tesfalidet, S. *et al.* (2016) Detection of methotrexate in a flow system using electrochemical impedance spectroscopy and multivariate data analysis. [Anal Chim Acta. 914: 1-6.](#)
3. Phal, S. *et al.* (2017) Determination of methotrexate in spiked human blood serum using multi-frequency electrochemical immittance spectroscopy and multivariate data analysis. [Anal Chim Acta. 987: 15-24.](#)
4. Phal, S. *et al.* (2018) Covalently electrografted carboxyphenyl layers onto gold surface serving as a platform for the construction of an immunosensor for detection of methotrexate [JElectroanalytical Chem. 812: 235-43.](#)
5. Mwanza, D. *et al.* (2021) Electrografting of isophthalic acid monolayer and covalent attachment of antibody onto carbon surfaces: construction of capacitive biosensor for methotrexate detection [Electrochimica Acta. : 139360. \[Epub ahead of print\]](#)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10081 available at: <https://www.bio-rad-antibodies.com/SDS/6120-0004>
10081

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Sheep IgG (H/L) (5184-2304...) [Biotin](#)

North & South America

Tel: +1 800 265 7376

Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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