

## Datasheet: 6120-0004

|                      |                         |
|----------------------|-------------------------|
| <b>Description:</b>  | SHEEP ANTI METHOTREXATE |
| <b>Specificity:</b>  | METHOTREXATE            |
| <b>Format:</b>       | Serum                   |
| <b>Product Type:</b> | Polyclonal Antibody     |
| <b>Isotype:</b>      | Polyclonal IgG          |
| <b>Quantity:</b>     | 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](http://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.

|                                 |   |
|---------------------------------|---|
| <b>Target Species</b>           | Chemical  |
| <b>Product Form</b>             | Serum - liquid  |
| <b>Preservative Stabilisers</b> | 0.09% Sodium Azide (NaN <sub>3</sub> )  |
| <b>Immunogen</b>                | Methotrexate (4-amino-10-methylpteroyl-L-glutamic acid) conjugated via the carboxyl groups of the glutamic acid residue to KLH. |

### 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. Sereilakena, Pet *et al.* (2017) Determination of methotrexate in spiked human blood serum using multi-frequency electrochemical immittance spectroscopy and multivariate data analysis [Analytica Chimica 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 [Journal of Electroanalytical Chemistry. Jan 3 \[Epub ahead of print\].](#)

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**Storage** Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life** 18 months from date of despatch.

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**Health And Safety Information** Material Safety Datasheet documentation available at:  
Material Safety Datasheet Documentation #10081 available at:  
<https://www.bio-rad-antibodies.com/uploads/MSDS/10081.pdf>

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**Regulatory** For research purposes only

## Related Products

### Recommended Secondary Antibodies

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

Donkey Anti Sheep IgG (STAR88...) [DyLight@488](#), [DyLight@549](#), [DyLight@649](#),  
[FITC](#), [HRP](#)

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