

Datasheet: MCA1477A488

**BATCH NUMBER 158534**

|                      |                                    |
|----------------------|------------------------------------|
| <b>Description:</b>  | RAT ANTI HUMAN CD3:Alexa Fluor®488 |
| <b>Specificity:</b>  | CD3                                |
| <b>Format:</b>       | ALEXA FLUOR® 488                   |
| <b>Product Type:</b> | Monoclonal Antibody                |
| <b>Clone:</b>        | CD3-12                             |
| <b>Isotype:</b>      | IgG1                               |
| <b>Quantity:</b>     | 100 TESTS/1ml                      |

## 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 |
|--------------------|-----|----|----------------|--------------------|
| Flow Cytometry (1) | ▪   |    |                | 1/5 - 1/10         |

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 appropriate negative/positive controls.

**(1)Membrane permeabilization is required for this application. Bio-Rad recommends the use of Leucoperm™ (BUF09) for this purpose.**

### Target Species

Human

### Species Cross Reactivity

Reacts with: Bovine, Dog, Horse, Rhesus Monkey, Pig, Chicken, Mouse, Duck, Koala, Harbour Porpoise, Alpaca, Cynomolgus monkey, Spotted Hyena, Sea Lion, Cat, Amazon Parrot, Raccoon, Great horned owl (*Bubo virginianus*), Bullfrog, Xenopus, Rabbit, African green monkey

Based on sequence similarity, is expected to react with:Mammals, Birds, Amphibia

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

### Product Form

Purified IgG conjugated to Alexa Fluor 488 - liquid

| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|-----------|-------------|---------------------|-------------------|
|-----------|-------------|---------------------|-------------------|

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|                    |   |
|--------------------|---|
| <b>Preparation</b> | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
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|------------------------|---------------------------|
| <b>Buffer Solution</b> | Phosphate buffered saline |
|------------------------|---------------------------|

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|                     |  |
|---------------------|--|
| <b>Preservative</b> | 0.09% Sodium Azide (NaN <sub>3</sub> ) |
| <b>Stabilisers</b>  | 1% Bovine Serum Albumin                |

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|---------------------------------------|------------------------------|
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.05 mg/ml |
|---------------------------------------|------------------------------|

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|                  |   |
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| <b>Immunogen</b> | Synthetic peptide sequence derived from cytoplasmic epitope of CD3 (Glu-Arg-Pro-Pro-Pro-Val-Pro-Asn-Pro-Asp-Tyr-Glu-Pro-Cys) (ERPPPVPNPDYEP C ) |
|------------------|---|

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|                                |  |
|--------------------------------|--|
| <b>External Database Links</b> | <b>UniProt:</b><br><a href="#">P07766</a> <a href="#">Related reagents</a>       |
|                                | <b>Entrez Gene:</b><br><a href="#">916</a> CD3E <a href="#">Related reagents</a> |

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|                 |     |
|-----------------|-----|
| <b>Synonyms</b> | T3E |
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|             |             |
|-------------|-------------|
| <b>RRID</b> | AB_10844215 |
|-------------|-------------|

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|                    |   |
|--------------------|---|
| <b>Specificity</b> | <p><b>Rat anti Human CD3 antibody, clone CD3-12</b> raised against a peptide representing an invariant cytoplasmic sequence within the CD3ε chain recognizes human CD3ε. CD3 is a multimeric protein complex composed of four distinct polypeptide chains (ε, γ, δ, ζ) that assemble and function as three pairs of dimers (εγ, εδ, ζζ). The CD3 complex serves as a T cell co-receptor that associates non-covalently with the T cell receptor (TCR) (<a href="#">Malissen 2008</a>; <a href="#">Guy and Vignali 2009</a>; <a href="#">Smith-Garvin et al. 2009</a>). CD3 is a defining feature of cells belonging to the T cell lineage and can therefore be used as T cell marker.</p> <p>As Rat anti Human CD3, clone CD3-12 has been specifically raised against an epitope within the epsilon peptide chain, highly conserved among species clone CD3-12 has a very broad species crossreactivity for the CD3 marker. (<a href="#">Jones et al. 1993</a>; <a href="#">Kothlow et al. 2005</a>).</p> |
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|                   |  |
|-------------------|--|
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#### Further Reading

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#### 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. This product is photosensitive and should be protected from light.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1477A488>  
10041

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**Regulatory** For research purposes only

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## Related Products

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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