

Datasheet: MCA2061A647

**BATCH NUMBER 1702**

<b>Description:</b>	MOUSE ANTI HUMAN CD284:Alexa Fluor® 647
<b>Specificity:</b>	CD284
<b>Other names:</b>	TLR4
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	HTA125
<b>Isotype:</b>	IgG2a
<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	▪			Neat - 1/5

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Human								
Species Cross Reactivity	Reacts with: Rhesus Monkey, Guinea Pig, Pig, Dog, Bovine <b>N.B.</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	Ig Fraction conjugated to Alexa Fluor® 647 - liquid								
Max Ex/Em	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>Alexa Fluor®647</td><td>650</td><td>665</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®647	650	665		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
Alexa Fluor®647	650	665							
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant								

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml
<b>Immunogen</b>	Ba/F3 cell line expressing TLR4 (CD284).
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O00206</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">7099</a>    TLR4    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_324150
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD284 antibody, clone HTA125</b> recognizes the human Toll like receptor 4 (TLR4) cell surface antigen.</p> <p>TLR4, also known as CD284, has been demonstrated to act as a receptor for LPS on human monocytes and macrophages. TLR4 signalling of LPS stimulation requires the presence of the MD-2 molecule.</p> <p>TLR4 is weakly expressed by resting cells, but is upregulated following stimulation with LPS.</p> <p>This antibody has been demonstrated to block activation of monocytes with LPS. The use of a preservative free format of Mouse anti Human CD284 antibody, clone HTA125 (<a href="#">MCA2061EL</a> ) is recommended for functional assays.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells or 100ul whole blood.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Shimazu, R. <i>et al.</i> (1999) MD-2, a molecule that confers lipopolysaccharide responsiveness on Toll-like receptor 4. <a href="#">J Exp Med. 189 (11): 1777-82.</a></li> <li>2. Jiang, Q. <i>et al.</i> (2000) Lipopolysaccharide induces physical proximity between CD14 and toll-like receptor 4 (TLR4) prior to nuclear translocation of NF-kappa B. <a href="#">J Immunol. 165 (7): 3541-4.</a></li> <li>3. Yang, S. <i>et al.</i> (2001) Synergistic effect of muramyl dipeptide with lipopolysaccharide or lipoteichoic acid to induce inflammatory cytokines in human monocytic cells in culture. <a href="#">Infect Immun. 69 (4): 2045-53.</a></li> <li>4. Kawahara T <i>et al.</i> (2001) Type I <i>Helicobacter pylori</i> lipopolysaccharide stimulates toll-like receptor 4 and activates mitogen oxidase 1 in gastric pit cells. <a href="#">Infect Immun. 69</a></li> </ol>

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

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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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2061A647>  
10041

## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA929A647\)](#)

### Recommended Useful Reagents

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

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

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