

## Datasheet: MCA333S

**BATCH NUMBER 157091**

<b>Description:</b>	CHIMERIC HUMAN IgE ANTI NP
<b>Specificity:</b>	CHIMERIC HUMAN IgE ANTI NP
<b>Format:</b>	S/N
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	JW8/1
<b>Isotype:</b>	IgE
<b>Quantity:</b>	2 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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/20 - 1/100
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays (1)	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

**(1) This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays. Dialysis cassettes [EQU003](#) are suitable for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Tissue Culture Supernatant - liquid
<b>Preparation</b>	Tissue Culture Supernatant containing 0.2M Tris/HCl pH7.4 and 5-10% foetal calf serum
<b>Buffer Solution</b>	None present
<b>Preservative Stabilisers</b>	0.09% Sodium Azide

<b>Immunogen</b>	Hapten, 4-hydroxy-3-nitrophenylacetyl (NP).
<b>RRID</b>	AB_567284
<b>Fusion Partners</b>	Plasmids containing chimaeric heavy chain gene were fused with cells of the J558L mouse myeloma cell line.
<b>Specificity</b>	The immunoglobulin heavy chain has been produced by the linking of the antigen-binding, variable region genes of a mouse hybridoma to human constant region genes by <i>in vitro</i> DNA recombination procedures. The resulting chimeric antibody is subsequently expressed by the myeloma cell-line J558L after transfection. (The J558L cell-line self secretes a lambda light chain but no heavy chain). Thus a chimeric human IgE antibody specific for NP has been produced.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Neuberger, M.S. <i>et al.</i> (1984) Recombinant antibodies possessing novel effector functions. <a href="#">Nature. 312 (5995): 604-8.</a></li> <li>2. Sayers, I. <i>et al.</i> (2004) The importance of Lys-352 of human immunoglobulin E in FcepsilonRII/CD23 recognition. <a href="#">J Biol Chem. 279: 35320-5.</a></li> <li>3. Neuberger, M.S. <i>et al.</i> (1985) A hapten-specific chimaeric IgE antibody with human physiological effector function. <a href="#">Nature. 314 (6008): 268-70.</a></li> <li>4. Sallmann, E. <i>et al.</i> (2011) High-Affinity IgE Receptors on Dendritic Cells Exacerbate Th2-Dependent Inflammation. <a href="#">J Immunol. 187: 164-71.</a></li> <li>5. Xu, D. <i>et al.</i> (2012) RN486, a selective Bruton's tyrosine kinase inhibitor, abrogates immune hypersensitivity responses and arthritis in rodents. <a href="#">J Pharmacol Exp Ther. 341 (1): 90-103.</a></li> <li>6. Vangelista, L. <i>et al.</i> (2005) Membrane IgE binds and activates Fc epsilon RI in an antigen-independent manner. <a href="#">J Immunol. 174: 5602-11.</a></li> <li>7. Kulka, M. and Metcalfe, D.D. (2004) High-resolution tracking of cell division demonstrates differential effects of TH1 and TH2 cytokines on SCF-dependent human mast cell production in vitro: correlation with apoptosis and Kit expression. <a href="#">Blood. 105: 592-9.</a></li> <li>8. Novak, N. <i>et al.</i> (2003) Evidence for a differential expression of the FcepsilonRIgamma chain in dendritic cells of atopic and nonatopic donors. <a href="#">J Clin Invest. 111: 1047-56.</a></li> <li>9. Sawada, J. <i>et al.</i> (2005) Stem cell factor has a suppressive activity to IgE-mediated chemotaxis of mast cells. <a href="#">J Immunol. 174: 3626-32.</a></li> <li>10. Ferguson, G.D. <i>et al.</i> (2016) A Novel Triazolopyridine-Based Spleen Tyrosine Kinase Inhibitor That Arrests Joint Inflammation. <a href="#">PLoS One. 11 (1): e0145705.</a></li> <li>11. Shirley D <i>et al.</i> (2016) Resveratrol preferentially inhibits IgE-dependent PGD<sub>2</sub> biosynthesis but enhances TNF production from human skin mast cells. <a href="#">Biochim Biophys Acta. pii: S0304-4165(16)00015-5.</a></li> <li>12. Burton Oliver T. <i>et al.</i> (2016) A humanized mouse model of anaphylactic peanut allergy <a href="#">Journal of Allergy and Clinical Immunology. Jun 08 [Epub ahead of print]</a></li> <li>13. Troupin, A. <i>et al.</i> (2016) A Role for Human Skin Mast Cells in Dengue Virus Infection and Systemic Spread. <a href="#">J Immunol. 197 (11): 4382-4391.</a></li> <li>14. Bratke, K. <i>et al.</i> (2017) Differential regulation of PD-1 and its ligands in allergic asthma. <a href="#">Clin Exp Allergy. 47 (11): 1417-25.</a></li> <li>15. Mchale, C. <i>et al.</i> (2018) Interleukin-6 potentiates FcεRI-induced PGD<sub>2</sub> biosynthesis</li> </ol>

and induces VEGF from human *in situ* -matured skin mast cells [Biochimica et Biophysica Acta \(BBA\) - General Subjects. \[Epub ahead of print\].](#)

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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. 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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**Health And Safety Information** Material Safety Datasheet documentation #10053 available at: <https://www.bio-rad-antibodies.com/SDS/MCA333S>  
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**Regulatory** For research purposes only

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