

## Datasheet: MCA6411GA

<b>Description:</b>	MOUSE ANTI HUMAN POLR3A
<b>Specificity:</b>	POLR3A
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AB01/1E10
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## 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
Immunoprecipitation	▪			
Western Blotting	▪			1/1000

**The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range.** Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant protein, aa 600-996 of human POLR3A

**External Database  
Links**

**UniProt:**

[O14802](#)   [Related reagents](#)

**Entrez Gene:**

[11128](#) POLR3A   [Related reagents](#)

---

**Specificity**

**Mouse anti Human POLR3A antibody** recognizes POLR3A, otherwise known as DNA-directed RNA polymerase III largest subunit, DNA-directed RNA polymerase III subunit A, RNA polymerase III 155kDa subunit and RNA polymerase III subunit C160.

DNA-directed RNA polymerase is responsible for catalyzing the transcription of DNA into RNA via the four ribonucleoside triphosphates as substrates. It constitutes the largest and catalytic core of RNA polymerase III and transcribes small RNAs such as 5S rRNA and tRNAs; molecules essential for the normal functioning and survival of cells ([Dieci et al. 2007](#)). This protein plays a critical role in detecting and controlling infection by intracellular bacteria and DNA viruses. It also acts as a non-self double stranded DNA sensor in the innate immune response. Synthesis of non-self DNA into RNA leads to type I interferon production via the RIG-1 pathway ([Chiu et al. 2009](#)). Mutations in the POLR3A gene have been linked to a cluster of inherited neurodegenerative disorders called Hypomyelinating Leukodystrophy ([Bernard et al. 2011](#)). Furthermore, studies show the possible connection of the mutated POLR3A gene to autoimmune diseases such as Scleroerma.

Mouse anti Human POLR3A antibody detects a band of 157 kDa.

---

**Western Blotting**

Mouse anti Human POLR3A antibody detects a band of 157 kDa in HeLa cell lysates

---

**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

---

**Acknowledgements**

PrecisionAb is a trademark of Bio-Rad Laboratories.

---

**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA6411GA>  
10040

---

**Regulatory**

For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)   [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### **Recommended Negative Controls**

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M415278:221220'

**Printed on 18 Jan 2024**

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)