

Datasheet: BUF034A

**BATCH NUMBER 167438**

|                      |                   |
|----------------------|-------------------|
| <b>Description:</b>  | ELISA SYNBLOCK    |
| <b>Name:</b>         | ELISA SYNBLOCK    |
| <b>Format:</b>       | Ready To Use      |
| <b>Product Type:</b> | Accessory Reagent |
| <b>Quantity:</b>     | 100 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 | ▪   |    |                | Neat               |

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.

|                                 |  |
|---------------------------------|--|
| <b>Product Form</b>             | Ready to use - liquid                  |
| <b>Buffer Solution</b>          | Phosphate buffered saline              |
| <b>Preservative Stabilisers</b> | <0.1% sodium azide (NaN <sub>3</sub> ) |

**Product Information** **ELISA Synblock** is an ELISA buffer designed to avoid false positive results associated with buffers containing animal proteins (e.g. BSA) and reduce non-specific background signals in ELISA assays without the addition of the usual protein additives.

**Intended Use** **ELISA SynBlock** is a novel protein-free blocking buffer suitable for use in all ELISA formats requiring maximum blocking strength. With Tween and synthetic blocking agents, the inert nature of this unique buffer, enables maximum reduction of non-specific binding and interference associated particularly with sandwich ELISA assays.

Additional molecular stabilizers and an antimicrobial agent provide a long-term stable environment for coating antigen or capture antibody. Plates can be blocked at room temperature and stored once dried for up to a year at +4°C.

N.B. SYNBLOCK is not suitable for use on Immunolon-2 plates. Bio-Rad recommends the use of [BUF033A](#) for this purpose.

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#### Instructions For Use

1. Coat ELISA plate with antibody or antigen as required.
2. After incubation, remove the coating solution and wash the plate x2 with wash buffer. [BUF031A](#) can be used for this purpose.
3. Add 300-400ul of BUF034A and incubate for 2-24 hours. Use a volume equal to or greater than the volume of coating solution.
4. After removal of the blocking buffer continue with the assay or dry the plate for long-term storage at +4°C.

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#### References

1. Afrough, B. *et al.* (2007) Identification and elimination of false-positives in an ELISA-based system for qualitative assessment of glycoconjugate binding using a selection of plant lectins. [Biotechniques. 43 \(4\): 458, 460, 462 passim.](#)
2. Dalley, D. *et al.* (2008) Development and evaluation of a gamma-interferon assay for tuberculosis in badgers (*Meles meles*). [Tuberculosis \(Edinb\). 88: 235-43.](#)
3. Ahmed, R.R. *et al.* (2010) BACE1 and BACE2 enzymatic activities in Alzheimer's disease. [J Neurochem. 112: 1045-53.](#)
4. Chambers, M.A. *et al.* (2009) Performance of TB immunodiagnostic tests in Eurasian badgers (*Meles meles*) of different ages and the influence of duration of infection on serological sensitivity. [BMC Vet Res. 5: 42.](#)
5. Thompson, R. *et al.* (2011) Optimization of the enzyme-linked lectin assay for enhanced glycoprotein and glycoconjugate analysis. [Anal Biochem. 413: 114-22.](#)
6. Kuramitz, H. *et al.* (2012) Multiplexed assay for proteins based on sequestration electrochemistry using the protein binding electroactive magnetic microbeads. [Anal Sci. 28 \(1\): 77.](#)
7. Dwek, M.V. *et al.* (2010) A sensitive assay to measure biomarker glycosylation demonstrates increased fucosylation of prostate specific antigen (PSA) in patients with prostate cancer compared with benign prostatic hyperplasia. [Clin Chim Acta. 411 \(23-24\): 1935-9.](#)
8. Verhelst, R. *et al.* (2010) The effects of plant polyphenols on enterotoxigenic *Escherichia coli* adhesion and toxin binding [Livestock Science. 133 \(1-3\): 101-3](#)
9. Verhelst, R. *et al.* (2013) *E. coli* heat labile toxin (LT) inactivation by specific polyphenols is aggregation dependent. [Vet Microbiol. 163 \(3-4\): 319-24.](#)
10. Greenwell P *et al.* (2008) Purification and analysis of DNases of *Trichostrongylus axei*: evidence that these enzymes are glycoproteins. [Int J Parasitol. 38 \(7\): 749-56.](#)
11. Beckett, T.L. *et al.* (2013) A ketogenic diet improves motor performance but does not affect  $\beta$ -amyloid levels in a mouse model of Alzheimer's disease. [Brain Res. 1505: 61-7.](#)
12. Abdul, H.M. *et al.* (2009) Cognitive decline in Alzheimer's disease is associated with selective changes in calcineurin/NFAT signaling. [J Neurosci. 29 \(41\): 12957-69.](#)
13. Niedowicz DM *et al.* (2013) Leptin regulates amyloid  $\beta$  production via the  $\gamma$ -secretase complex. [Biochim Biophys Acta. 1832 \(3\): 439-44.](#)
14. Martin SB *et al.* (2014) Synaptophysin and synaptotagmin-1 in Down syndrome are differentially affected by Alzheimer's disease. [J Alzheimers Dis. 42 \(3\): 767-75.](#)

15. Wilcock, D.M. *et al.* (2015) Down syndrome individuals with Alzheimer's disease have a distinct neuroinflammatory phenotype compared to sporadic Alzheimer's disease. [Neurobiol Aging. 36 \(9\): 2468-74.](#)
16. Chinthamani S *et al.* (2017) Macrophage inducible C-type lectin (Mincle) recognizes glycosylated surface (S)-layer of the periodontal pathogen *Tannerella forsythia*. [PLoS One. 12 \(3\): e0173394.](#)
17. LeVine, H. 3rd. *et al.* (2017) Down syndrome: age-dependence of PiB binding in postmortem frontal cortex across the lifespan. [Neurobiol Aging. 54: 163-9.](#)

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| <b>Storage</b>                       | Store at +4°C.<br><br>DO NOT FREEZE   |
| <b>Guarantee</b>                     | Guaranteed until date of expiry. Please see product label.  |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10380 available at: <a href="https://www.bio-rad-antibodies.com/SDS/BUF034A">https://www.bio-rad-antibodies.com/SDS/BUF034A</a><br>10380 |
| <b>Regulatory</b>                    | For research purposes only  |

## Related Products

### Recommended Useful Reagents

[5x ELISA COATING BUFFER \(BUF030A\)](#)

[10x ELISA WASH BUFFER \(BUF031A\)](#)

|                                  |   |                  |   |               |   |
|----------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>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<br>Fax: +44 (0)1865 852 739<br>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<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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