# SpeedBlot (His)

**Order # PR-SB01-01**



Mo Bi Tec
MOLECULAR BIOTECHNOLOGY

## Contents



**For research use only!!!**

## 1. Description

SpeedBlot (His) is a ready-to-use reagent for the detection of poly-histidine tagged proteins in blot assays. This reagent is equally suitable for Western Blot assays and Dot or Slot Blot assays. The detection reagent is made of an optimized anti-histidine antibody gold nanoparticle conjugate and is reactive against C- and N-terminal tags. The protein of interest is specifically stained in pink directly on the blot. It contains the Qiagen Penta-His Antibody which is covered by patents exclusively licensed to Qiagen GmbH, Germany.

Instant detection of poly-histidine tagged proteins on nitrocellulose membrane with SpeedBlot (His) is easy and does not require relevant hands-on time. Even 0.1 pmol detection limits can be achieved with this highly sensitive detection reagent. This is in the range of conventional ECL detection.

***"As easy as Ponceau Red but as specific as ECL antibody!"***

## 2. Kit Contents

| | |
|---|---|
| **Product Name** | SpeedBlot (His) |
| **Order#** | PR-SB01-01 |
| **Kit Contents** | 30 ml SpeedBlot (His), User Manual |
| **Typical working volumes** | Typically, 10 ml are being used per blot. The reagent can be used three times or even more often, depending on the application. |
| **Storage** | SpeedBlot (His) should be stored at room temperature (RT), ideally 16 °C to 25 °C. Freezing should be avoided. |
| **Stability** | Originally sealed, the shelf life is 12 month. Upon opening the reagent should be used up within 3 month. |

## 3. Terms & Conditions

**Product Usage:** For *In Vitro* Laboratory Research Use Only. NOT to be administered to humans or used for medical diagnosis.

**Limited Product Warranty:** We offer a LIMITED PRODUCT WARRANTY to our customers. This warranty is limited to 6 months from date of shipment and limits our liability to replacement of this product. No other warranties of any kind, express or implied, including without limitation, implied warranties of merchantability or fitness for a particular purpose, are provided by MoBiTec GmbH. We shall have no liability for any direct, indirect, consequential, or incidental damages arising out of the use, the results of use, or the inability to use this product.

## 4. Quality Control

The reagent is manufactured under strict quality control ensuring consistent high product standard. To protect the product from contamination all components are sterilized.

## 5. Safety Instructions

The reagent contains 0.05% (w/v) sodium azide. This hazardous component requires no declaration below 0.1%. The antibody and gold particle concentration is below the declaration boundary.

However, as the influence of nanoparticles on the body is not fully understood, exposure should be thoroughly avoided. Especially vapor and aerosol generation should be prevented to avoid inhalation. Direct skin and mucosal contact should be circumvented. Accidental spillage should be absorbed with inert material and transferred to a suitable for disposal. Special local regulations should be respected.

## 6. SpeedBlot (His) Protocol

Electroblotting is performed as usual, e.g., protein is transferred from SDS-PAGE onto nitrocellulose (NC) or polyvinylidene fluoride (PVDF) membrane. Alternatively, fractions from cell extracts or column purification are spotted onto a suitable membrane. In any case, the membrane should be quickly rinsed with plain tap water to remove remaining detergent. The membrane is placed into a clean incubation tray of suitable size.

The SpeedBlot (His) ready-to-use reagent is poured onto the membrane to cover it completely. Incubation is performed on a suitable lab shaker. No blocking, washing, or successive antibody incubation time is required. In approximately one hour His-tagged fusion proteins become visible due to the antibody-induced accumulation of gold particles.

When the staining is satisfactorily strong (30-90 min), the excess of reagent is removed by tap water rinsing of the membrane. The membrane can be dried with filter paper and archived or scanned. There is no detection equipment required. The detection signal is visible to the human eye and may be quantified by spectroscopy or photo-technical equipment. The intensity of the band is proportional to the amount of protein present, thus quantification can be easily achieved with standard spotted next to the sample.

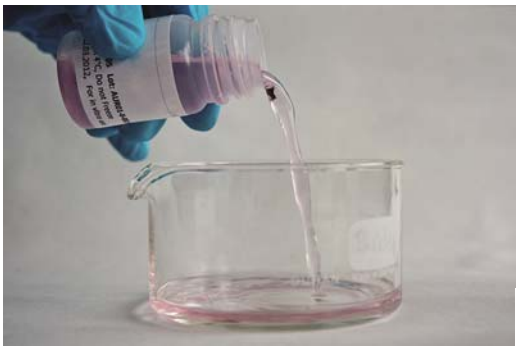

**Figure 1**. Pour SpeedBlot (His) into suitable container

**Figure 2**. Submerge membrane in SpeedBlot (His)

**Figure 3**. Incubate until signal is clearly visible (30-90 min)

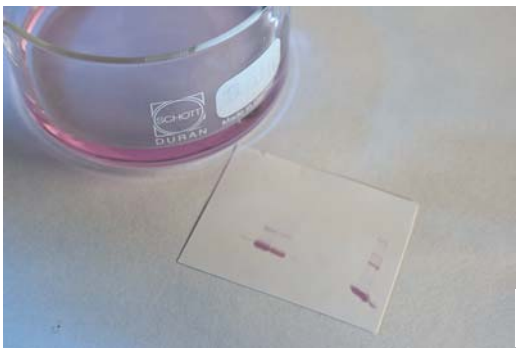


**Figure 4**. Stained poly-his proteins on the membrane

## 7. Troubleshooting

| Problem | Possible cause | Suggestion |
|---|---|---|
| No signal | SpeedBlot (His) reagent faded, as it is reused, contaminated, or frozen | Use fresh SpeedBlot (His) reagent and a clean tray |
| | No/not sufficient poly-his tagged protein present on the membrane | Increase incubation time, increase protein amount, use fresh protein, add a control line, or check the sequence for frame shift or stop codon incidence |
| Too much background | Extended incubation may result in detection of degraded protein or natural multi his proteins | Use less protein and/or shorten incubation time |

## 8. Order Information, Shipping, and Storage

| Order# | Product | Amount |
|---|---|---|
| PR-SB01-01 | SpeedBlot (His) | 30 ml |
| shipped at RT; store at RT | | |

## 9. Related Products

| Order# | Product | Amount |
|---|---|---|
| PB01 | Perfect-Block ™ Blocking Reagent (gelatin absed) | 100 g |
| MOBI05 | MobiFairy Protein Stabilizer | 2 ml |
| PR-MAG00041-01 | M-Beads Magnetic silica beads S-C8, 1.2 µm | 2 ml |

## 10. Contact and Support

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