Data Sheet

Reconstitution/Storage
50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Albumin and azide were added for stabilization. For reconstitution add 50 µl H2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. For detailed information, see back of the data sheet.

ApplicationsWB: 1 : 1000 up to 1 : 10000 (AP staining) suitable for Dot Blot
IP: yes
ICC: 1 : 200
IHC: not tested yet
IHC-P/FFPE: 1 : 100
ELISA: yes suitable for sandwich-ELISA

ImmunogenN6-methyladenosine fused to BSA.

ReactivityReacts with: human, rat, mouse, eukaryotes, prokaryotes. Other species not tested yet.

SpecificitySpecific for N6-methyladenosine (m6A) with some cross-reactivity to m6Am.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Selected References for 202 003

N6-methyladenine DNA Modification in Glioblastoma.

N6-Deoxyadenosine Methylation in Mammalian Mitochondrial DNA.

Validation strategies for antibodies targeting modified ribonucleotides.

N6-methyladenosine in DNA antagonizes SATB1 in early development.

N6-methyladenosine demethylases Alkbh5/Fto regulate cerebral ischemia-reperfusion injury.

Methyl Adenine Identification (MadID): High-Resolution Detection of Protein-DNA Interactions.
Umlauf D, Sobekki M, Crabbé L

MadID, A Versatile Approach to Map Protein-DNA Interactions, Highlights Telomere-Nuclear Envelope Contact Sites in Human Cells.
Sobekki M, Souaid C, Boulay J, Guérineau V, Noordermeer D, Crabbé L
Cell reports (2021) 341: 108580 . . . DOTBLOT, IP, ICC; tested species: human

Melatonin restores the pluripotency of long-term-cultured embryonic stem cells through melatonin receptor-dependent m6A RNA regulation.
Journal of pineal research (2020) 692: e12669 . . . DOTBLOT, IP; tested species: mouse

Immuno-Northern Blotting: Detection of RNA Modifications by Using Antibodies against Modified Nucleosides.
RNA m6A Modification Functions in Larval Development and Caste Differentiation in Honeybee (Apis mellifera).
Cell reports (2021) 341: 108580 . . . DOTBLOT, IP

Melatonin restores the pluripotency of long-term-cultured embryonic stem cells through melatonin receptor-dependent m6A RNA regulation.
Journal of pineal research (2020) 692: e12669 . . . DOTBLOT, IP; tested species: mouse

FTO Demethylates Cyclin D1 mRNA and Controls Cell-Cycle Progression.
Cell reports (2020) 311: 107464 . . . DOTBLOT, IP; tested species: mouse

METTL3 and N6-Methyladenosine Promote Homologous Recombination-Mediated Repair of DSBs by Modulating DNA-RNA Hybrid Accumulation.
Molecular cell (2020) . . . IP, ICC; tested species: human

YTHDF2 promotes spermatogenic adhesion through modulating MMPs decay via m6A/mRNA pathway.
Cell death & disease (2020) 111: 37 . . . DOTBLOT, IP; tested species: human

Access the online factsheet including applicable protocols at https://sysy.com/product/202003 or scan the QR-code.
FAQ - How should I store my antibody?

Shipping Conditions

- All our antibodies and control proteins / peptides are shipped lyophilized (vacuum freeze-dried) and are stable in this form without loss of quality at ambient temperatures for several weeks.

Storage of Sealed Vials after Delivery

- **Unlabeled** and **biotin-labeled antibodies** and control proteins should be stored at 4°C before reconstitution. **They must not be stored in the freezer when still lyophilized!** Temperatures below zero may cause loss of performance.
- **Fluorescence-labeled antibodies** should be reconstituted immediately upon receipt. Long term storage (several months) may lead to aggregation.
- **Control peptides** should be kept at -20°C before reconstitution.

Long Term Storage after Reconstitution (General Considerations)

- The storage freezer must not be of the frost-free variety ("no-frost freezer"). This cycle between freezing and thawing (to reduce frost-build-up), which is exactly what should be avoided. For the same reason, antibody vials should be placed in an area of the freezer that has minimal temperature fluctuations, for instance towards the back rather than on a door shelf.
- Aliquot the antibody and store frozen (-20°C to -80°C). Avoid very small aliquots (below 10 µl) and use the smallest storage vial or tube possible. The smaller the aliquot, the more the stock concentration is affected by evaporation and adsorption of the antibody to the surface of the storage vial or tube. Adsorption of the antibody to the surface leads to a substantial loss of activity.
- The addition of glycerol to a final concentration of 50% lowers the freezing point of your stock and keeps your antibody at -20°C in liquid state. This efficiently avoids freeze and thaw cycles.

Product Specific Hints for Storage

Control proteins / peptides:

- Store at -20°C to -80°C.

Monoclonal Antibodies

- **Ascites** and **hybridoma supernatant** should be stored at -20°C up to -80°C. **Prolonged storage at 4°C is not recommended!** Unlike serum, ascites may contain proteases that will degrade the antibodies.
- **Purified IgG** should be stored at -20°C up to -80°C. Adding a carrier protein like BSA will increase long term stability. Many of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Polyclonal Antibodies

- **Crude antisera**: With anti-microbials added, they may be stored at 4°C. However, frozen storage (-20°C up to -80°C) is preferable.
- **Affinity purified antibodies**: Less robust than antisera. Storage at -20°C up to -80°C is recommended. Adding a carrier protein like BSA will increase long term stability. Most of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Avoid repeated freeze-thaw cycles for all antibodies!

FAQ - How should I reconstitute my antibody?

Reconstitution

- All our antibodies are lyophilized from PBS. To reconstitute the antibody in PBS, add the amount of deionized water given in the respective datasheet. If higher volumes are preferred, add water as mentioned above and then the desired amount of PBS and a stabilizing carrier protein (e.g. BSA) to a final concentration of 2%. Some of our antibodies already contain albumin. Take this into account when adding more carrier protein.
- For complete reconstitution, carefully remove the lid. After adding water, briefly vortex the solution. You can spin down the liquid by placing the vial into a 50 ml centrifugation tube filled with paper.
- If desired, add small amounts of azide or thimerosal to prevent microbial growth. This is especially recommended if you want to keep an aliquot 4°C.
- After reconstitution of fluorescence-labeled antibodies, add 1 : 1 (v/v) glycerol to a final concentration of 50%. This lowers the freezing point of your stock and keeps your antibody in liquid state at -20°C.
- Glycerol may also be added to unlabeled primary antibodies. It is a suitable way to avoid freeze-thaw cycles.
- Please refer to our tips and hints for subsequent storage of reconstituted antibodies and control peptides and proteins.