

AM26687AF-N**Monoclonal Antibody to 6xHistidine Epitope Tag (HHHHHH) - Azide Free**

Alternate names:	6xHis-Tag, HHHHHH Tag, HIS6 Tag, His Tag
Quantity:	0.1 mg
Background:	A variety of plasmids contain DNA that encodes an N-terminal tag consisting of six histidine (His) residues, followed by an extended multiple cloning sites. The His-Tag fusion protein expression system is commonly used because the 6 x His-Tag on the recombinant proteins allows for efficient coupling to Ni ⁺⁺ affinity resins and purification by a single step chromatography.
Host / Isotype:	Mouse / IgG1
Clone:	6C4
Immunogen:	Synthetic peptide 6 His
Format:	State: Liquid Ig fraction Purification: Protein A agarose Buffer System: PBS containing 50% glycerol, pH 7.2, without preservatives
Applications:	Western blot: 1 µg/ml for chemiluminescence detection system. Details see protocol below. Not recommended for Immunoprecipitation. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This specific antibody for His-Tag fusion protein is useful for monitoring of the fusion protein expression and affinity purification.
Add. Information:	This product was originally produced by MBL International.
Storage:	Store (in aliquots) at -20 °C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Porath, J., et al., Protein Express. Purif. 3, 263-281 (1992).
Protocols:	SDS-PAGE & Western Blotting 1) Mix the sample with equal volume of Laemmli's sample buffer. 2) Boil the samples for 2 minutes and centrifuge. Load 10 µL of the sample per lane in a 1 mm thick SDS-polyacrylamide gel for electrophoresis. 3) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm ² for 1 hour in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacture's manual for precise transfer procedure. 4) To reduce nonspecific binding, soak the membrane in 10% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature, or overnight at 4°C. 5) Incubate the membrane with primary antibody diluted with PBS, pH 7.2 containing 1% skimmed milk as suggest in the APPLICATIONS for 1 hour at room temperature. (The concentration of antibody will depend on condition.) 6) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 minutes x 3 times). 7) Incubate the membrane with the 1:10,000 HRP-conjugated anti-mouse IgG diluted

- with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
- 8) Wash the membrane with PBS-T (5 minutes x 6 times).
- 9) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 minute. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 10) Expose to an X-ray film in a dark room for 5 minutes. Develop the film as usual. The condition for exposure and development may vary.

Pictures:

Western blot analysis of His-Azami-Green (1) and His-EGFP (2) using AM26687AF-N.

