

SM1693HRP**Monoclonal Antibody to 6xHistidine Epitope Tag (HHHHHH) - HRP****Quantity:** 0.1 mg**Concentration:** 1.0 mg/ml

Background: 6x-His tags are a type of tag for expressed proteins. This tag is made up of 6 histidine residues attached to either the N- or C-terminal of a protein. Proteins expressed with this type of tag are then traditionally purified using a divalent metal ion column. However, using an antibody specific to this 6x-His tag, the protein can be analyzed for by Western blot or immunofluorescence techniques, thus eliminating the need for a protein-specific antibody. 6x-His tags are particularly effective for the purification of protein expressed in E. coli systems.

Host / Isotype: Mouse / IgG1**Clone:** AD1.1.10

Immunogen: PAX6 transcription factor linked to histidine tag.
Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.

Format: **State:** Liquid purified IgG fraction**Purification:** Affinity Chromatography on Protein G**Buffer System:** PBS, pH 7.4 containing 0.01% Thiomersal as preservative and a HRP stabilizer**Label:** HRP – Horseradish Peroxidase

Applications: This product is routinely tested in ELISA and Western blotting on Histidine tagged ubiquitin.

ELISA: 1/20-1/1000.**Western Blot:** 1/1000-1/5000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognizes proteins containing the motif *H-H-H-H-H-H* and is therefore of value in detecting proteins containing histidine tags. The antibody may be used to track the purification of proteins expressed in bacteria, yeast or insect cells. It reacts against all His tagged proteins so far tested.

Clone AD1.1.10 has been used to detect and purify histidine-tagged proteins expressed in mammalian (Hoffmann et al. 2007) and Hwang et al. 2008) and non-mammalian (Zheng et al. 2007; Gunnarsen et al. 2010; and de Vooght et al. 2012) cell lines.

In Western blotting of bacterial extracts the antibody has been shown not to cross-react with any endogenous products, although some cross-reactivity may be seen with extracts of insect or mammalian cells.

Storage:

Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf life: one year from despatch.

General Readings:

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9. Bahi A, Kusnecov A, Dreyer JL. The role of tissue-type plasminogen activator system in amphetamine-induced conditional place preference extinction and reinstatement. *Neuropsychopharmacology.* 2008 Oct;33(11):2726-34. doi: 10.1038/sj.npp.1301668. Epub 2008 Feb 6. PubMed PMID: 18256596.
10. Gunnarsen KS, Lunde E, Kristiansen PE, Bogen B, Sandlie I, Løset GÅ. Periplasmic expression of soluble single chain T cell receptors is rescued by the chaperone FkpA. *BMC Biotechnol.* 2010 Feb 3;10:8. doi: 10.1186/1472-6750-10-8. PubMed PMID: 20128915.
11. Hwang HY, Duvall MR, Tomlinson S, Boackle RJ. Highly specific inhibition of C1q globular-head binding to human IgG: a novel approach to control and regulate the classical complement pathway using an engineered single chain antibody variable

fragment. Mol Immunol. 2008 May;45(9):2570-80. doi: 10.1016/j.molimm.2007.12.019. Epub 2008 Mar 3. PubMed PMID: 18313756.

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Pictures:

Western blot analysis of His-Ubiquitin recombinant protein probed with MOUSE ANTI HISTIDINE TAG:HRP (SM1693HRP).

