

Anti-1-pHis [SC50-3] Standard Size Ab02385-1.1

This chimeric mouse antibody was made using the variable domain sequences of the original Rabbit IgG format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1, Kappa

Clone Number: SC50-3

Alternative Name(s) of Target: 1-phosphohistidine; N1-Phosphohistidine; histidine

UniProt Accession Number of Target Protein:

Published Application(s): Immunoaffinity purification, WB, ELISA

Published Species Reactivity: Species independent

Immunogen: The original rabbit version of this antibody was raised by immunizing rabbits with a 1-pTza library conjugated to the carrier protein keyhole limpet hemocyanin (KLH).

Specificity: This antibody is specific for 1-pHis and does not cross react with phosphotyrosine (pTyr) or the other pHis isomers.

Application Notes: This antibody can be used for the identification of 1-pHis substrates and functional study of pHis. A dot blot was preformed on rabbit antisera, the 1-pTza, 3-pTza peptide libraries, His control library and a pTyr peptide with this antibody demonstrating its specificity to 1-pHis (Fuhs et al, 2015; pmid:26140597). This antibody has been also used for a western blot on His6-NDPK-A protein (Felix et al, 2020; pmid:32384736). Immunofluorescence was preformed on mouse tissues with this antibody (Yang et al, 2019; pmid:31721359). An ELISA was preformed on 3-day differentiated Sca1+-VPCs with this antibody (Yang et al, 2019; pmid:31721359). Ca1+-VPCs were lysed and immunoprecipitated with this clone (Yang et al, 2019; pmid:31721359). Finally, immunoaffinity purification (IAP) columns, containing protein A crosslinked with this antibody. The samples were SK-N-BE(2) xenograft tumors from mice (Adam et al, 2020; pmid:32392889).

Antibody First Published in: Fuhs et al. Monoclonal 1- and 3-Phosphohistidine Antibodies: New Tools to Study Histidine Phosphorylation Cell. 2015 Jul 2; 162(1): 198–210. PMID:26140597

Note on publication: Describes the generation and characterization of the monoclonal antibodies (mAbs) that specifically recognize 1-pHis or 3-pHis.

Product Form

Size: 200 μg Purified antibody.

Purification:

Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4° C for up to 3 months. For longer storage, aliquot and store at -

20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.