

LHX4 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant LHX4. Catalog # AT2706a

Specification

LHX4 Antibody (monoclonal) (M04) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC, E <u>Q969G2</u> <u>NM_033343</u> Human mouse Monoclonal IgG1 Kappa 43124

LHX4 Antibody (monoclonal) (M04) - Additional Information

Gene ID 89884

Other Names LIM/homeobox protein Lhx4, LIM homeobox protein 4, LHX4

Target/Specificity LHX4 (NP_203129, 208 a.a. ~ 306 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution IHC~~1:100~500 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions LHX4 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

LHX4 Antibody (monoclonal) (M04) - Protocols

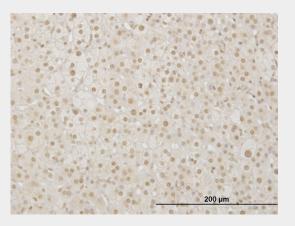
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot

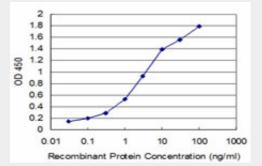


- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

LHX4 Antibody (monoclonal) (M04) - Images



Immunoperoxidase of monoclonal antibody to LHX4 on formalin-fixed paraffin-embedded human adrenal gland. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged LHX4 is approximately 0.1ng/ml as a capture antibody.

LHX4 Antibody (monoclonal) (M04) - Background

This gene encodes a member of a large protein family which contains the LIM domain, a unique cysteine-rich zinc-binding domain. The encoded protein may function as a transcriptional regulator and be involved in control of differentiation and development of the pituitary gland. Mutations in this gene are associated with syndromic short stature and pituitary and hindbrain defects. An alternative splice variant has been described but its biological nature has not been determined.

LHX4 Antibody (monoclonal) (M04) - References

Mutation and gene copy number analyses of six pituitary transcription factor genes in 71 patients with combined pituitary hormone deficiency: identification of a single patient with LHX4 deletion. Dateki S, et al. J Clin Endocrinol Metab, 2010 Aug. PMID 20534763.A novel dysfunctional LHX4 mutation with high phenotypical variability in patients with hypopituitarism. Castinetti F, et al. J Clin Endocrinol Metab, 2008 Jul. PMID 18445675.Three novel missense mutations within the LHX4 gene are associated with variable pituitary hormone deficiencies. Pfaeffle RW, et al. J Clin Endocrinol Metab, 2008 Mar. PMID 18073311.Specificity protein 1 (Sp1) plays role in regulating LIM homeodomain transcription factor Lhx4 gene expression. Liu S, et al. Biochem Biophys Res



Commun, 2008 Feb 1. PMID 18053794. The C terminus of the synovial sarcoma-associated SSX proteins interacts with the LIM homeobox protein LHX4. de Bruijn DR, et al. Oncogene, 2008 Jan 24. PMID 17667940.