

## Anti-LMP1 [H3] Standard Size Ab00761-1.1

This full-length, chimeric mouse antibody was made using the variable domain sequences of the original Human scFv format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG1, Kappa

**Clone Number:** H3

**Alternative Name(s) of Target:** latent membrane protein 1; LMP1; LMP-1; p63; protein p63; protein p25

**UniProt Accession Number of Target Protein:** P03230

**Published Application(s):** inhibit, IP, ELISA, IF

**Published Species Reactivity:** Epstein-Barr virus (EBV)

**Immunogen:** H3 was selected by its affinity for GST-LMP1 from a human phage display library after 4 rounds of panning.

**Specificity:** H3 scFv is specific to the LMP1 C terminal region where it binds to CTAR-1 (GST-LMP1[187-242]). LMP1 is expressed constitutively in many EBV-associated tumours and this protein can cause B lymphocyte and rodent fibroblast transformation, cell apoptosis inhibition by up-regulation of anti-apoptotic proteins, cell surface marker and DNA methyltransferase activity up-regulation, and cell adhesion molecule and cyclin-dependent kinase downregulation. The C-terminal domain of LMP1 is made up of 3 C-terminal activating regions (CTARs) which interact with TNF receptor-associated proteins and TNF receptor-associated death domain protein, which mediate activation of NF-κB and AP-1. A LMP1 TAR is also involved in the JAK/STAT pathway.

**Application Notes:** H3 scFv can reduce LMP1-mediated NF-κappaB activation in HEK293 cells by ~50% as well as inhibit LMP1 functions in epithelial cells - enables the potential use of H3 for attenuating the LMP1 function in LMP1-positive tumors. H3 is also capable of reducing the trans-membrane migration ability of MDCK-LMP1 cells by blocking the CTAR-mediated signaling pathway. H3 can also be used to pull down LMP1 in IPs, and can be used for ELISAs and to visualise LMP1 distribution in IF studies.

**Antibody First Published in:** Fang et al. Modulation of Epstein-Barr virus latent membrane protein 1 activity by intrabodies. Intervirology. 2007;50(4):254-63. Epub 2007 Apr 25. [PMID:17460414](#)

**Note on publication:** Describes the generation of and characterization of a number of scFvs specific for different regions of the LMP1 C terminal domain.

## 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.