

Anti-LMP1 [H3] Standard Size Ab00761-23.0

This full-length, chimeric rabbit 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: Rabbit IgG, 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.