

Anti-MuLV TM Antibody, clone 42-114 clone 42-114, from rat

Art. ID	SAF-MABF2074-200UL
Unit	1 x 200 µL
Deliverydetails	No Dangerous Good

Description

The murine leukemia virus (MuLV) is a gammaretrovirus that has a positive, single-stranded sense RNA, which replicates via reverse transcription. The envelope of the virus is shown to be covered with glycoprotein spikes. Three major genes produced by the murine leukemia virus are gag, pol, and env. The gag gene codes for the group-specific antigen that is responsible for the production of the viral matrix capsid and nucleoproteins. The pol gene encodes reverse transcriptase, a protease, and an integrase. The reverse transcriptase is used to make complementary DNA by reverse transcribing its own RNA into DNA. The reverse transcriptase in MuLV is able to act as a monomer as opposed to a dimer. The integrase integrates the synthesized viral DNA into the host cell's DNA. The env gene codes for a glycosylated protein that is processed into the two viral envelope proteins, gp70 and p15(E), which aid the virus in selecting and attacking host cells. The gp70 protein has the receptor binding activity of the virus. Retrovirus membrane fusion is catalyzed by the Env, surface (SU) and transmembrane (TM) proteins. The SU protein is involved in receptor binding, while the TM protein contains the necessary elements for membrane fusion. Clone 42-114 is TM-specific and does not recognize G541R mutants. (Ref. Schneider, WM., et al. (2008). Virology. 371(1), 165-174).