## Recombinant Simian immunodeficiency virus Protein Vpx(vpx)

Catalog No: #AP71020

Package Size: #AP71020-1 20ug #AP71020-2 100ug #AP71020-3 1mg



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

Product Name	Recombinant Simian immunodeficiency virus Protein Vpx(vpx)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-112aaSequence Info:Full Length
Other Names	Viral protein XX ORF protein
Accession No.	P19508
Calculated MW	28.9 kDa
Tag Info	N-terminal 6xHis-SUMO-tagged
Target Sequence	${\tt MSDPRERIPPGNSGEETIGEAFDWLDRTVEEINRAAVNHLPRELIFQVWRRSWEYWHDEMGMSVSYTKYRYL}$
	CLIQKAMFMHCKKGCRCLGGEHGAGGWRPGPPPPPPGLA
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability
	of the protein itself.
	Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months
	at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for
	up to one week.

## Background

Plays a role in nuclear translocation of the viral pre-integration complex (PIC), thus is required for the virus to infect non-dividing cells. Targets specific host proteins for degradation by the 26S proteasome. Acts by associating with the cellular CUL4A-DDB1 E3 ligase complex through direct interaction with host VPRPB,DCAF-1. This change in the E3 ligase substrate specificity results in the degradation of host SAMHD1. In turn, SAMHD1 depletion allows viral replication in host myeloid cells by preventing SAMHD1-mediated hydrolysis of intracellular dNTPs necessary for reverse transcription.

## References

Structural basis of lentiviral subversion of a cellular protein degradation pathway. Schwefel D., Groom H.C., Boucherit V.C., Christodoulou E., Walker P.A., Stoye J.P., Bishop K.N., Taylor I.A. Nature 505:234-238(2014) Research Topic: Others

Note: This product is for in vitro research use only and is not intended for use in humans or animals.