

Product information

PolyQuant Cov-MS-2

Introduction

PolyQuant's **PQ-Cov-MS-2** peptide standard facilitates diagnosis of common respiratory infections in gargle solution or nasopharyngeal swabs with high accuracy and sensitivity through mass spectrometry.

The **PQ-Cov-MS-2** peptide standard is based on PolyQuant's proprietary QconCAT technology, providing 59 peptides as unlabelled or as heavy isotope labelled artificial protein to be released by protease treatment with trypsin during sample preparation.

PQ-Cov-MS-2 protein information

The 76.67 kDa synthetic protein comprises peptides for the SARS-CoV-2 nuclear capsid protein (NCAP), Influenza A and B NCAP and matrix protein (MP) and the human respiratory syncytial virus A NCAP, MP and phosphoprotein (PP). Additionally, the synthetic protein comprises synthetic peptides for workflow calibration and standardisation (complementing product: RePLiCal, PQ-CS-1561).



PolyQuant's **PQ-CoV-MS-2** peptide standard is available as unlabelled and as ¹⁵N heavy isotope labelled purified protein.

Recommendations for use

Optimal amount of QconCAT per patient sample is depending on instrumentation and workflow setup. For initial analysis we suggest to use 10 ng of QconCAT per sample. Please make sure to detect more than one transition with a sufficient signal-to-noise ratio to enable automated peak picking.

Technical details

Peptide list

Sequence	Protein	Category	Information
MGTK			Start peptide
GAIETEPAVK	Repical		Control peptide
ITFGG PSDSTGSNQNGER	NCAP	SARS-CoV-2	
GQGVPI NTNSSPDDQIGYYR	NCAP	SARS-CoV-2	
RATANK		artificial	Linker
DGIIVVATEGALNTPK	NCAP	SARS-CoV-2	
DHIGTR	NCAP	SARS-COV-2	
NPANNA AIVLQLPQGTTLPK	NCAP	SARS-COV-2	
AYNVTQAFGR	NCAP	SARS-COV-2	
RGPEQTQKKK		artificial	Missed cleavage
ADETQALPQR	NCAP	SARS-COV-2	
QK			Missed cleavage
DKKK	NCAP	SARS-COV-2-delta	
AYETQALPQR		SARS-COV-2-delta	
QK			Missed cleavage
KQQTVTLLPAADLDDFSK	NCAP	SARS-COV-2	
LIQNSLTIER	NCAP	Influenza A	
MVLSAFDER	NCAP	Influenza A	
RNR	NCAP	Influenza A	
YLEEHPSAGKDPK	NCAP	Influenza A	
KTGGAQR	NCAP	Influenza A	
AMMDQVR	NCAP	Influenza A	
ESRYDFEK	NCAP	Influenza A	
EGYSLVGIDPFK	NCAP	Influenza A	
LLQNFRGR		artificial	
GVFELSDEK	NCAP	Influenza A	
ATNAQR		artificial	
LEDVFAGK	MP	Influenza A	
NTDLEVK		artificial	
TRPILSPLTK	MP	Influenza A	
GILGRKLR		artificial	
EITFHGAK	MP	Influenza A	
EISLHENR		artificial	
MVLASTTAK	MP	Influenza A	
TIGTHPSSSAGLK	MP	Influenza A	
AYQKR	MP	Influenza A	
MGVQMQR	MP	Influenza A	
FK	MP	Influenza A	
TEIKK	NCAP	Influenza B	
SVYNMVVK	NCAP	Influenza B	
SSYVGDEASSK	Repical		
AGLNDDMER	NCAP	Influenza B	

ALVDQVIGSR	NCAP	Influenza B	
SMVVVRPSVASK	NCAP	Influenza B	
VVLPISYAK	NCAP	Influenza B	
GAAYEDLR	NCAP	Influenza B	
VLSALTGTEFKPR	NCAP	Influenza B	
SALK	NCAP	Influenza B	
LTDIQK	MP	Influenza B	
ALIGASICFLKPK	MP	Influenza B	
DQERKRR	MP	Influenza B	
FITEPLSGMGTTATKK	MP	Influenza B	
KGLMQVK		artificial	
LGTLCALCEK	MP	Influenza B	
LAEELQSNIGVLR	MP	Influenza B	
GEGIK	MP	Influenza B	
DVMEVLK	MP	Influenza B	
LNDTLNK	NCAP	HRSA	
DQLSSSK	NCAP	HRSA	
YTIQR	NCAP	HRSA	
LGGEAGFYHILNNPK	NCAP	HRSA	
NQDLYDAK	NCAP	HRSA	
VTSKK		artificial	
VIIPTYLR	MP	HRSA	
SISVR	MP	HRSA	
MEK	PP	HRSA	
FAPEFHGEDANNR	PP	HRSA	
ATK	PP	HRSA	
FLESIK GK	PP	HRSA	
FTSLVSFK		artificial	
EDPTPSDNPFSK	PP	HRSA	
LNSPK		artificial	
IRVYNTVISYIESNRK	PP	HRSA	
NNK	PP	HRSA	
KTIK	PP	HRSA	
NTLDIHKSITINNP	PP	HRSA	
IVPEPQPK	Repical		
LAAALEHHHHH	His-Tag		