

PolyQuant's CHOcoCAT Kit provides 86 reference peptides for absolute protein quantification of 29 common and critical CHO-specific host cell proteins (HCP). The peptides are grouped according to abundance in CHO cells onto two individual, completely  $^{15}\text{N}$  labelled, QconCAT proteins.

The QconCATs are optimized for digestion with trypsin or tryptic-like digestion (cleavage after Arg and Lys). Other proteases will not generate suitable reference peptides.

**Kit content (for 50 applications):**

Component	Amount (mol)	Concentration	Storage buffer
PQ-CHO-1	50 pmol	0.1 pmol/ $\mu\text{l}$	50 mM ABC
PQ-CHO-2	50 pmol	0.1 pmol/ $\mu\text{l}$	50 mM ABC

**Sample preparation**

QconCATs are added directly to your analyte sample prior to sample preparation (reduction, alkylation, digestion). We recommend to add  $\geq 10$  nM of QconCAT to your analyte and proceed with your routine sample preparation procedure.

**MS measurement**

The required amount of reference standard depends on instrumentation. For LC systems used in nanoFlow ( $< 1\mu\text{l}/\text{min}$ ), we recommend using 500 fmol QconCAT on column per injection as a starting point.

**Protein list:**

<b>QconCAT ID</b>	<b>Protein</b>	<b>Gene</b>	<b>Uniprot</b>	<b>No of peptides</b>
PQ-CHO-1	Peroxiredoxin-1	PRDX1	Q9JKY1	3
PQ-CHO-1	Phospholipase B-like	PLBL2	G3I6T1	3
PQ-CHO-1	Procollagen-lysine,2-oxoglutarate 5-dioxygenase 1	PLOD1	G3IIE7	3
PQ-CHO-1	Protein disulfide-isomerase	PDI	Q8R4U2	3
PQ-CHO-1	Protein S100	S100A6	G3HC31	3
PQ-CHO-1	Pyruvate kinase	PK	G3H3Q1	3
PQ-CHO-1	Serine protease HTRA1	HTRA1	G3IBF4	3
PQ-CHO-1	B9 domain-containing protein 2	TGFB1	G3IA12	3
PQ-CHO-1	Lipoprotein lipase	LPL	G3H6V7	3
PQ-CHO-1	Glutathione S-transferase	GSTP1	G3I3Y6	3
PQ-CHO-1	Endoplasmic reticulum chaperone BiP	GRP78	G3I8R9	3
PQ-CHO-1	Phosphopyruvate hydratase	ENOA	G3I0W1	3
PQ-CHO-1	Annexin	ANXA5	G3I5A4	3
PQ-CHO-1	C-X-C motif chemokine	CXCL3	A4URF0	3
PQ-CHO-1	Peptidyl-prolyl cis-trans isomerase A	PPIA	P14851	3
PQ-CHO-2	Group XV phospholipase A2	LPLA2	G3HKV9	3
PQ-CHO-2	Matrix metalloproteinase 19	MMP-19	G3HRK9	3
PQ-CHO-2	C-C motif chemokine	MCP-1	G3GTT2	2
PQ-CHO-2	Lipase	LAL	G3HQY6	3
PQ-CHO-2	Clusterin	Clusterin	G3H NJ3	3
PQ-CHO-2	Carboxypeptidase D	CPD	G3HR95	3
PQ-CHO-2	Liver carboxylesterase 1-like protein	CES1	A0A061IFE2	3
PQ-CHO-2	Liver carboxylesterase B-1-like protein	CES1-B1L	A0A061I7X9	3
PQ-CHO-2	Cathepsin B	CatB	G3H0L9	3
PQ-CHO-2	Cathepsin D	CatD	G3I4W7	3
PQ-CHO-2	Cathepsin E	CatE	G3HAY9	3
PQ-CHO-2	Cathepsin L	CatL	G3INC5	3
PQ-CHO-2	Cathepsin X	CatZ	Q9EPP7	3
PQ-CHO-2	Sialate O-acetyltransferase	SIAE	G3IIB1	3