

>Bs0881 vegetative catalase 1 (katA) [1.11.1.6] {Bacillus subtilis 168}

MSSNKLTTSWGAPVGDNQNSM*TAGSRGPTLIQDVHLLLEKLAHFNRER*VPERVVHAKGAGAHGYFEVTNDVTKYTKAAFLSEVGRKRTPLFIRFSTVAGELGSADTVRDPGRFAVKFYTEEGN
 YDIVGNNTPVFFIRDAIKFPDFIHTQKRDPK*THLKNPTAVWDFWLSPELHQVITILMSDRGIPATLRHM*HGFGSHTFKWTNAELEGVWIKYHFKTEQGK*NLVDVNTAAKI*AGENPDYHTE
 DLFNAIENGDPYPAWKLYVQIM*PLEDANTYRFDPFDVTKVWSQKDYPLIEVGRM*VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDKML*QGRLFAYHDAHRYRVGANHQALP*INRARNK*VNN
 YQRDGM*RFDDNGGGSVYEPNSFGGPKESPEDKQAAYPVQGIADSVSYDHYDHYTQAGDLRLM*SEDERTRL*LVENIVNAM*KPVEKEEIKLRQIEHFYKADPEYGRVAEGLGLPIK*KDS

cyan background, found peptide

Sequence	#aa	Modifications	Modified Sequence	Elution Time	Mascot Score	Intensity
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	35,34	1,23	161680
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	35,365	8,52	51055
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	36,599	14,96	52459000
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	36,564	27,54	36013000
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	38,581	13,73	716640
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	38,584	9,97	370880
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	38,503	7,73	16092
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	39,792	10,62	322260
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	39,811	13,05	511920
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	44,93	15,09	781520
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	44,877	31,89	241450
HMHGFGSHTFK	11	Oxidation_Eth (M)	_HM(ox)HGFGSHTFK_	38,02	23,09	25015
HMHGFGSHTFK	11	Oxidation_Eth (M)	_HM(ox)HGFGSHTFK_	38,055	8,56	625440
HMHGFGSHTFK	11	Unmodified	_HMHGFGSHTFK_	39,579	32,35	41247000
HMHGFGSHTFK	11	Unmodified	_HMHGFGSHTFK_	39,591	36,12	2500900
HMHGFGSHTFK	11	Met->Eth (M)	_HM(*)HGFGSHTFK_	43,175	7,17	1073200
HMHGFGSHTFK	11	Met->Eth (M)	_HM(*)HGFGSHTFK_	43,149	25,07	347530
LMSEDER	7	Oxidation (M)	_LM(ox)SEDER_	33,448	34	951290
LMSEDER	7	Oxidation_Eth (M)	_LM(ox)SEDER_	34,913	36,87	98176
LMSEDER	7	Unmodified	_LMSEDER_	36,916	27,24	4173800
LMSEDER	7	Met->Eth (M)	_LM(*)SEDER_	40,375	33,83	625370
LRQIEHFYK	9	Unmodified	_LRQIEHFYK_	46,448	27,17	293270
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	54,672	16,53	345500
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	56,773	11,25	1475300
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	58,026	12,1	438150
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	60,657	31,68	434430
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	62,425	49,36	36471000
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	62,403	79,41	38338000
LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	61,677	44,13	218080
LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	69,749	49,39	28220000

LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	69,735	63,33	23649000
LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	70,807	52,77	112160
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation_Eth (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	63,979	56,65	1925900
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation_Eth (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	63,983	48,3	321230
LTTSWGAPVGDNQNSMTAGSR	21	Met->Eth (M)	_LTTSWGAPVGDNQNSM(*)TAGSR_	74,278	86,26	383140
LVENIVNAMK	10	Met->Eth (M)	_LVENIVNAM(*)K_	35,454	1,21	155700
LVENIVNAMK	10	Oxidation (M)	_LVENIVNAM(ox)K_	52,765	43,73	976970
LVENIVNAMK	10	Unmodified	_LVENIVNAMK_	73,092	52,54	3168700
LVENIVNAMKPVEK	14	Oxidation (M)	_LVENIVNAM(ox)KPVEK_	52,674	40,71	77070000
LVENIVNAMKPVEK	14	Oxidation (M)	_LVENIVNAM(ox)KPVEK_	52,671	61,19	4768000
LVENIVNAMKPVEK	14	Oxidation (M)	_LVENIVNAM(ox)KPVEK_	52,802	3,59	1189800
LVENIVNAMKPVEK	14	Oxidation_Eth (M)	_LVENIVNAM(ox)KPVEK_	56,015	21,88	1025800
LVENIVNAMKPVEK	14	Met->Eth (M)	_LVENIVNAM(*)KPVEK_	79,743	43,63	117950
LVENIVNAMKPVEK	14	Met->Eth (M)	_LVENIVNAM(*)KPVEK_	79,744	22,93	2229500
LVENIVNAMKPVEK	14	Unmodified	_LVENIVNAMKPVEK_	73,349	49,31	
LVENIVNAMKPVEK	14	Unmodified	_LVENIVNAMKPVEK_	74,112	47,26	
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	53,722	19,87	478940
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	54,264	12,52	294570
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,442	40,12	45478000
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,463	42,42	2846300
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,433	18,35	94671000
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,491	2,38	3715700
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	64,152	1,22	216590
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	75,8	5,58	303070
LVENIVNAMKPVEKEEIK	18	Oxidation_Eth (M)	_LVENIVNAM(ox)KPVEKEEIK_	59,633	4,6	3931100
LVENIVNAMKPVEKEEIK	18	Oxidation_Eth (M)	_LVENIVNAM(ox)KPVEKEEIK_	59,628	30,59	669170
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	74,159	7,91	238330
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,315	19,89	135820000
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,311	46,4	71661000
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,297	70,07	3552700
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,143	8,9	1041400
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	105,12	3,34	227980
LVENIVNAMKPVEKEEIK	18	Met->Eth (M)	_LVENIVNAM(*)KPVEKEEIK_	81,815	33,77	1723100
LVENIVNAMKPVEKEEIKLR	20	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIKLR_	63,673	12,87	1304800
LVENIVNAMKPVEKEEIKLR	20	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIKLR_	63,671	29,22	113220
LVENIVNAMKPVEKEEIKLR	20	Unmodified	_LVENIVNAMKPVEKEEIKLR_	82,576	3,6	2255900
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	75,355	9,09	1367700
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	87,3	38,63	65613000
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	87,934	46,32	84204000
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	87,946	90,26	127660000
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	93,035	40,99	147910
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	95,575	50,87	520400
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	86,414	15,49	
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,245	82,19	4339800
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,266	39,96	1758400
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,92	91,88	3731000
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,916	35,91	1604800
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	96,842	8,34	106070
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	96,34	63,61	253370
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	97,302	57,15	73830000
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	98,457	54,12	1991200
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	98,673	94,34	2867500
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	97,569	97,54	

LYVQIMPLEDANTYR	15	Met->Eth (M)	_LYVQIM(*)PLEDANTYR_	102,53	60,34	6232500
LYVQIMPLEDANTYRFDPFDVTK	23	Oxidation (M)	_LYVQIM(ox)PLEDANTYRFDPFDVTK_	114,81	25,97	13900000
LYVQIMPLEDANTYRFDPFDVTK	23	Oxidation (M)	_LYVQIM(ox)PLEDANTYRFDPFDVTK_	114,79	26,76	1776300
LYVQIMPLEDANTYRFDPFDVTK	23	Oxidation (M)	_LYVQIM(ox)PLEDANTYRFDPFDVTK_	114,82	12,42	114630
LYVQIMPLEDANTYRFDPFDVTK	23	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYRFDPFDVTK_	115,94	19,54	129000
LYVQIMPLEDANTYRFDPFDVTK	23	Unmodified	_LYVQIMPLEDANTYRFDPFDVTK_	118,85	30,8	10418000
LYVQIMPLEDANTYRFDPFDVTK	23	Unmodified	_LYVQIMPLEDANTYRFDPFDVTK_	118,83	25,26	992910
MLQGR	5	Oxidation (M)	_M(ox)LQGR_	23,271	23,48	359370
MLQGR	5	Oxidation_Eth (M)	_M(ox)LQGR_	28,585	6,99	7472,4
MLQGR	5	Oxidation_Eth (M)	_M(ox)LQGR_	31,412	3,47	17371
MLQGR	5	Unmodified	_MLQGR_	34,101	10,33	
MLQGR	5	Unmodified	_MLQGR_	34,33	27,79	
MLQGR	5	Met->Eth (M)	_M(*)LQGR_	36,762	8,74	
MVLDR	5	Oxidation (M)	_M(ox)VLDR_	36,034	24,89	5199600
MVLDR	5	Unmodified	_MVLDR_	41,253	17,08	11006000
MVLDR	5	Met->Eth (M)	_M(*)VLDR_	46,414	20,99	1327500
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	112,75	13,25	513060
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	118,43	11,84	1268100
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	118,54	30,67	903410
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	119,09	38,6	1239900
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	119,99	57,7	165950000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation_Eth (M)	_M(ox)VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,16	49,78	1273100
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Unmodified	_MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,7	39,63	69376000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Unmodified	_MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,71	53,31	54611000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Unmodified	_MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,71	37,15	13843000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	39	2 Oxidation (M)	_M(ox)VLDRNPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	118,51	17,43	696420
NPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	34	Oxidation (M)	_NPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	119,32	99,04	1777300
NPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	34	Oxidation (M)	_NPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	119,32	47,41	5487400
NPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	34	Oxidation (M)	_NPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	119,33	2,95	669190
NPTAVWDFWLSPELHQVTILMSDR	26	Oxidation (M)	_NPTAVWDFWLSPELHQVTILM(ox)SDR_	120,19	71,94	18437000
NPTAVWDFWLSPELHQVTILMSDR	26	Oxidation (M)	_NPTAVWDFWLSPELHQVTILM(ox)SDR_	120,18	34,85	9023800
SSNKLTTSWGAPVGDNQNSMTAGSR	25	Oxidation (M)	_SSNKLTTSWGAPVGDNQNSM(ox)TAGSR_	57,09	63,32	1008800
SSNKLTTSWGAPVGDNQNSMTAGSR	25	Unmodified	_SSNKLTTSWGAPVGDNQNSMTAGSR_	63,36	81,54	341890
TEQGVKNLDVNTAAK	15	Unmodified	_TEQGVKNLDVNTAAK_	43,349	28,9	2733400
TEQGVKNLDVNTAAK	15	Unmodified	_TEQGVKNLDVNTAAK_	45,997	7,75	114740
TPLFIR	6	Unmodified	_TPLFIR_	59,142	32,02	
TPLFIR	6	Unmodified	_TPLFIR_	59,905	33,64	
TPLFIR	6	Unmodified	_TPLFIR_	60,641	33,12	
TPLFIR	6	Unmodified	_TPLFIR_	61,57	29,52	
TPLFIR	6	Unmodified	_TPLFIR_	63,908	12,64	
VAEGLGLPIK	10	Unmodified	_VAEGLGLPIK_	70,048	57,19	73600000
VAEGLGLPIK	11	Unmodified	_VAEGLGLPIK_	55,546	56,11	73457000
VAEGLGLPIK	11	Unmodified	_VAEGLGLPIK_	59,501	13,63	2714200
VAEGLGLPIK	11	Unmodified	_VAEGLGLPIK_	55,043	34,28	
VAEGLGLPIK	11	Unmodified	_VAEGLGLPIK_	55,873	46,51	
VAEGLGLPIK	11	Unmodified	_VAEGLGLPIK_	56,746	16,55	
VAEGLGLPIK	11	Unmodified	_VAEGLGLPIK_	57,456	18,35	
VAEGLGLPIK	11	Unmodified	_VAEGLGLPIK_	57,599	16,49	
VAEGLGLPIK	13	Unmodified	_VAEGLGLPIK_	57,605	39,05	1145700
VAEGLGLPIK	13	Unmodified	_VAEGLGLPIK_	57,627	59,06	99193
VAEGLGLPIK	13	Unmodified	_VAEGLGLPIK_	59,391	33,03	1167200
VAEGLGLPIK	13	Unmodified	_VAEGLGLPIK_	59,901	15,79	584560

VGANHQALPINR	12	Unmodified	_VGANHQALPINR_	43,225	22,83	1862200
VGANHQALPINR	12	Unmodified	_VGANHQALPINR_	43,168	45,71	59512
VGANHQALPINR	12	Unmodified	_VGANHQALPINR_	41,885	34,43	
VGANHQALPINR	12	Unmodified	_VGANHQALPINR_	42,375	33,91	
VGANHQALPINR	12	Unmodified	_VGANHQALPINR_	42,691	33,53	
VGANHQALPINRAR	14	Unmodified	_VGANHQALPINRAR_	39,169	23,35	182720
VVHAKGAGAHGYFEVTNDVTK	21	Unmodified	_VVHAKGAGAHGYFEVTNDVTK_	50,504	24,63	1021100
VVHAKGAGAHGYFEVTNDVTK	21	Unmodified	_VVHAKGAGAHGYFEVTNDVTK_	50,395	11,06	428390
VVHAKGAGAHGYFEVTNDVTK	21	Unmodified	_VVHAKGAGAHGYFEVTNDVTK_	50,289	12,05	78141
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	74,143	86,05	18577000
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	77,219	3,98	105940
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	83,844	84,96	326760
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	88,084	65,09	239190
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	93,254	65,86	215290
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	99,407	60,31	122750
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	109,89	45,56	137570
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	112,85	49,05	84171
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	116,06	46,39	205820
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	125,05	92,86	96489
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	131,93	47,78	68685
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	133,76	19,77	53591
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	134,73	57,63	66152
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	136,1	48,19	90473
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	140,1	52,66	52741
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	73,638	85,86	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	74,605	72,79	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	75,48	68,37	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	77,147	54,92	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	78,022	57,64	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	79,821	12,63	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	79,972	64,58	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	102,45	68,93	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	102,68	61,03	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	103,21	64,95	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	103,57	73,94	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	104,28	61,31	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	104,72	51,72	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	105,47	50,82	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	106,03	48,44	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	106,37	52,29	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	106,48	68,91	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	106,78	43,88	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	125,98	38,77	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	126,33	71,78	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	126,99	48,62	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	128,57	49,59	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	129,56	56,03	
WTNAEGEGVWIK	12	Unmodified	_WTNAEGEGVWIK_	139,26	9,29	
YHFKTEQGVK	10	Unmodified	_YHFKTEQGVK_	38,149	13,54	853220
YRVGANHQALPINR	14	Unmodified	_YRVGANHQALPINR_	45,516	11,2	1275600
YRVGANHQALPINR	14	Unmodified	_YRVGANHQALPINR_	45,508	24,45	547390
YTKA AFLSEVGK	12	Unmodified	_YTKA AFLSEVGK_	59,322	59,73	435590

YTKAFLSEVGK	12	Unmodified	_YTKAFLSEVGK_	59,331	31,66	2993500
YTKAFLSEVGKR	13	Unmodified	_YTKAFLSEVGKR_	53,895	18,9	814850
YTKAFLSEVGKR	13	Unmodified	_YTKAFLSEVGKR_	53,904	67,62	194470

intensities:

Eth, Eth ox

*

MSSNKLTTSWGAPVGDNQNSMTAGSRGPTLIQDVHLLLEKLAHFNRERVPERVVHAKGAGAHGYFEVTNDVTKYTKAFLSEVGKRTPLFIRFSTVAGELGSADTVRDPGRGFAVKFYTEEGN
 LTTSWGAPVGDNQNSMTAGSR
 SSNKLTTSWGAPVGDNQNSMTAGSR

*

YDIVGNNTPVFFIRDAIKFPDFIHTQKRDPKTHLKNPTAVWDFWLSPELSLHQVTILMSDRGIPATLRHMHGFGSHTFKWTNAEGEGVWIKYHFKTEQGKLNLDVNTAAKIAGENPDYHTE
 NPTAVWDFWLSPELSLHQVTILMSDR
 HMHGFGSHTFK

* * *

DLFNAIENGDYPAWKLYVQIMPLEDANTYRFDPFDVTKVWSQKDYPLIEVGRMVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGRLFAYHDAHRYRVGANHQALPINRARNKVVNN
 LYVQIMPLEDANTYR
 LYVQIMPLEDANTYRFDPFDVTK
 MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK
 MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR
 NPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR

* * *

YQRDGQMRFFDDNGGGSVYYEPNSFGGPKESPEDKQAAYPVQGIADSVSYDHYDHYTQAGDLRYLMSEDERTRLVENIVNAMKPVEKEEIKLRQIEHFYKADPEYGRVAEGLGLPIKKS
 LMSEDER LVENIVNAMK
 LVENIVNAMKPVEK
 LVENIVNAMKPVEKEEIK
 LVENIVNAMKPVEKEEIKLR

Met

Sequence	#aa	Modifications	Modified Sequence	Elution Time	Mascot Score	Intensity
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	35,34	1,23	161680
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	35,365	8,52	51055
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	36,599	14,96	52459000
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	36,564	27,54	36013000
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	38,581	13,73	716640
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	38,584	9,97	370880
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	38,503	7,73	16092
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	39,792	10,62	322260
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	39,811	13,05	511920
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	44,93	15,09	781520
HMHGFGSHTFK	11	Oxidation (M)	_HM(ox)HGFGSHTFK_	44,877	31,89	241450
HMHGFGSHTFK	11	Unmodified	_HMHGFGSHTFK_	39,579	32,35	41247000
HMHGFGSHTFK	11	Unmodified	_HMHGFGSHTFK_	39,591	36,12	2500900
LMSEDER	7	Oxidation (M)	_LM(ox)SEDER_	33,448	34	951290

LMSEDER	7	Unmodified	_LMSEDER_	36,916	27,24	4173800
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	54,672	16,53	345500
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	56,773	11,25	1475300
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	58,026	12,1	438150
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	60,657	31,68	434430
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	62,425	49,36	36471000
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	62,403	79,41	38338000
LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	61,677	44,13	218080
LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	69,749	49,39	28220000
LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	69,735	63,33	23649000
LTTSWGAPVGDNQNSMTAGSR	21	Unmodified	_LTTSWGAPVGDNQNSMTAGSR_	70,807	52,77	112160
LVENIVNAMK	10	Oxidation (M)	_LVENIVNAM(ox)K_	52,765	43,73	976970
LVENIVNAMK	10	Unmodified	_LVENIVNAMK_	73,092	52,54	3168700
LVENIVNAMKPVEK	14	Oxidation (M)	_LVENIVNAM(ox)KPVEK_	52,674	40,71	77070000
LVENIVNAMKPVEK	14	Oxidation (M)	_LVENIVNAM(ox)KPVEK_	52,671	61,19	4768000
LVENIVNAMKPVEK	14	Oxidation (M)	_LVENIVNAM(ox)KPVEK_	52,802	3,59	1189800
LVENIVNAMKPVEK	14	Unmodified	_LVENIVNAMKPVEK_	73,349	49,31	
LVENIVNAMKPVEK	14	Unmodified	_LVENIVNAMKPVEK_	74,112	47,26	
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	53,722	19,87	478940
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	54,264	12,52	294570
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,442	40,12	45478000
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,463	42,42	2846300
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,433	18,35	94671000
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	56,491	2,38	3715700
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	64,152	1,22	216590
LVENIVNAMKPVEKEEIK	18	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIK_	75,8	5,58	303070
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	74,159	7,91	238330
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,315	19,89	135820000
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,311	46,4	71661000
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,297	70,07	3552700
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	76,143	8,9	1041400
LVENIVNAMKPVEKEEIK	18	Unmodified	_LVENIVNAMKPVEKEEIK_	105,12	3,34	227980
LVENIVNAMKPVEKEEIKLR	20	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIKLR_	63,673	12,87	1304800
LVENIVNAMKPVEKEEIKLR	20	Oxidation (M)	_LVENIVNAM(ox)KPVEKEEIKLR_	63,671	29,22	113220
LVENIVNAMKPVEKEEIKLR	20	Unmodified	_LVENIVNAMKPVEKEEIKLR_	82,576	3,6	2255900
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	75,355	9,09	1367700
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	87,3	38,63	65613000
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	87,934	46,32	84204000
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	87,946	90,26	127660000
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	93,035	40,99	147910
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	95,575	50,87	520400
LYVQIMPLEDANTYR	15	Oxidation (M)	_LYVQIM(ox)PLEDANTYR_	86,414	15,49	
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	96,34	63,61	253370
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	97,302	57,15	73830000
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	98,457	54,12	1991200
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	98,673	94,34	2867500
LYVQIMPLEDANTYR	15	Unmodified	_LYVQIMPLEDANTYR_	97,569	97,54	
LYVQIMPLEDANTYRFPDFDVTK	23	Oxidation (M)	_LYVQIM(ox)PLEDANTYRFPDFDVTK_	114,81	25,97	13900000
LYVQIMPLEDANTYRFPDFDVTK	23	Oxidation (M)	_LYVQIM(ox)PLEDANTYRFPDFDVTK_	114,79	26,76	1776300
LYVQIMPLEDANTYRFPDFDVTK	23	Oxidation (M)	_LYVQIM(ox)PLEDANTYRFPDFDVTK_	114,82	12,42	114630
LYVQIMPLEDANTYRFPDFDVTK	23	Unmodified	_LYVQIMPLEDANTYRFPDFDVTK_	118,85	30,8	10418000
LYVQIMPLEDANTYRFPDFDVTK	23	Unmodified	_LYVQIMPLEDANTYRFPDFDVTK_	118,83	25,26	992910

MLQGR	5	Oxidation (M)	_M(ox)LQGR_	23,271	23,48	359370
MLQGR	5	Unmodified	_MLQGR_	34,101	10,33	
MLQGR	5	Unmodified	_MLQGR_	34,33	27,79	
MVLDR	5	Oxidation (M)	_M(ox)VLDR_	36,034	24,89	5199600
MVLDR	5	Unmodified	_MVLDR_	41,253	17,08	11006000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDNRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	112,75	13,25	513060
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDNRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	118,43	11,84	1268100
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDNRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	118,54	30,67	903410
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDNRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	119,09	38,6	1239900
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation (M)	_M(ox)VLDNRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	119,99	57,7	16595000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Unmodified	_MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,7	39,63	69376000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Unmodified	_MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,71	53,31	54611000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Unmodified	_MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,71	37,15	13843000
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	39	2 Oxidation (M)	_M(ox)VLDNRNPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	118,51	17,43	696420
NPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	34	Oxidation (M)	_NPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	119,32	99,04	1777300
NPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	34	Oxidation (M)	_NPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	119,32	47,41	4587400
NPENYFAEVEQATFSPGTLVPGIDVSPDKMLQGR	34	Oxidation (M)	_NPENYFAEVEQATFSPGTLVPGIDVSPDKM(ox)LQGR_	119,33	2,95	669190
NPTAVWDFWLSLSPESLHQVTILMSDR	26	Oxidation (M)	_NPTAVWDFWLSLSPESLHQVTILM(ox)SDR_	120,19	71,94	18437000
NPTAVWDFWLSLSPESLHQVTILMSDR	26	Oxidation (M)	_NPTAVWDFWLSLSPESLHQVTILM(ox)SDR_	120,18	34,85	9023800
SSNKLTTSWGAPVGDNQNSMTAGSR	25	Oxidation (M)	_SSNKLTTSWGAPVGDNQNSM(ox)TAGSR_	57,09	63,32	1008800
SSNKLTTSWGAPVGDNQNSMTAGSR	25	Unmodified	_SSNKLTTSWGAPVGDNQNSMTAGSR_	63,36	81,54	341890
sum						1468081237

Eth

Sequence	#aa	Modifications	Modified Sequence	Elution Time	Mascot Score	Intensity
HMHGFGSHTFK	11	Oxidation_Eth (M)	_HM(ox)HGFGSHTFK_	38,02	23,09	25015
HMHGFGSHTFK	11	Oxidation_Eth (M)	_HM(ox)HGFGSHTFK_	38,055	8,56	625440
HMHGFGSHTFK	11	Met->Eth (M)	_HM(*)HGFGSHTFK_	43,175	7,17	1073200
HMHGFGSHTFK	11	Met->Eth (M)	_HM(*)HGFGSHTFK_	43,149	25,07	347530
LMSEDER	7	Oxidation_Eth (M)	_LM(ox)SEDER_	34,913	36,87	98176
LMSEDER	7	Met->Eth (M)	_LM(*)SEDER_	40,375	33,83	625370
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation_Eth (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	63,979	56,65	1925900
LTTSWGAPVGDNQNSMTAGSR	21	Oxidation_Eth (M)	_LTTSWGAPVGDNQNSM(ox)TAGSR_	63,983	48,3	321230
LTTSWGAPVGDNQNSMTAGSR	21	Met->Eth (M)	_LTTSWGAPVGDNQNSM(*)TAGSR_	74,278	86,26	383140
LVENIVNAMK	10	Met->Eth (M)	_LVENIVNAM(*)K_	35,454	1,21	155700
LVENIVNAMKPVEK	14	Oxidation_Eth (M)	_LVENIVNAM(ox)KPVEK_	56,015	21,88	1025800
LVENIVNAMKPVEK	14	Met->Eth (M)	_LVENIVNAM(*)KPVEK_	79,743	43,63	117950
LVENIVNAMKPVEK	14	Met->Eth (M)	_LVENIVNAM(*)KPVEK_	79,744	22,93	2229500
LVENIVNAMKPVEKEEIK	18	Oxidation_Eth (M)	_LVENIVNAM(ox)KPVEKEEIK_	59,633	4,6	3931100
LVENIVNAMKPVEKEEIK	18	Oxidation_Eth (M)	_LVENIVNAM(ox)KPVEKEEIK_	59,628	30,59	669170
LVENIVNAMKPVEKEEIK	18	Met->Eth (M)	_LVENIVNAM(*)KPVEKEEIK_	81,815	33,77	1723100
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,245	82,19	4339800
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,266	39,96	1758400
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,92	91,88	3731000
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	89,916	35,91	1604800
LYVQIMPLEDANTYR	15	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYR_	96,842	8,34	106070
LYVQIMPLEDANTYR	15	Met->Eth (M)	_LYVQIM(*)PLEDANTYR_	102,53	60,34	6232500
LYVQIMPLEDANTYRFPDFDVTK	23	Oxidation_Eth (M)	_LYVQIM(ox)PLEDANTYRFPDFDVTK_	115,94	19,54	129000
MLQGR	5	Oxidation_Eth (M)	_M(ox)LQGR_	28,585	6,99	7472,4

MLQGR	5	Oxidation_Eth (M)	_M(ox)LQGR_	31,412	3,47	17371
MLQGR	5	Met->Eth (M)	_M(*)LQGR_	36,762	8,74	
MVLDR	5	Met->Eth (M)	_M(*)VLDR_	46,414	20,99	1327500
MVLDRNPENYFAEVEQATFSPGTLVPGIDVSPDK	34	Oxidation_Eth (M)	_M(ox)VLD RNPENYFAEVEQATFSPGTLVPGIDVSPDK_	120,16	49,78	1273100
sum						35804334,4

intensity ratio Met:Eth = 1468081237 / 35804334,4 = 41 : 1

i.e., VERY LITTLE Eth-Catalase!!