
Protein Index

Column 1 lists alphabetically the (usually) preferred shorthand name. Column 2 gives an assignment of location in the cell: c, cytoplasm; ev, envelope; er, endoplasmic reticulum; g, Golgi; l, lipid particle; m, mitochondrion; n, nucleus; pm, plasma membrane; px, peroxisome; and v, vacuole. Column 3 lists the page(s) where that protein abbreviation is found. Citations to pages showing the reaction equation (usually a figure) are in boldface type; a few citations are to the unnamed reaction.

In Column 1, the preferred abbreviations are from the gene names: that is, protein Xyz1 specified by gene *XYZ1*. The main sources are the *Saccharomyces* Genome Database (SGD; <http://www.yeastgenome.org>) and The UniProt Knowledgebase (UniProtKB; <http://www.uniprot.org>). The alphabetic triads do not necessarily make sense; sometimes they refer to a pathway or function, sometimes to a chemical reaction, and sometimes to the remote phenotype of a mutant. (Also, proteins specific to a pathway do not all always have the same alphabetic triad, and there are cases where the same triad refers to different subjects.) The different gene *numbers* may refer to different enzymes, to different subunits of the same enzyme, or to elements governing expression or assembly. The same gene may be known by several names, but the index and text (almost) always use the one preferred by the databases. Other names, called “aliases,” are sometimes more familiar, and querying of the databases with an alias will bring up the preferred name. (Occasionally an alias is also given, as in Vtc4(Phm3).) The databases will provide the EC (Enzyme Commission) numbers for the individual reactions (see pp. 40–41). EC numbers can also be accessed at, for example, <http://www.ca.expasy.org/enzyme>.

The entries in column 2 (location) are mainly taken from SGD and UniProtKB, which at present use manual curation of the literature and are not specifically referenced. Yeast has many compartments: Assignments may be by default, by direct assay of the isolated organelle (as qualified, pp. 25–28), or by in silico analysis of targeting sequences or may depend on high-throughput screens. Locations may be multiple or dynamic or unknown, and locations of regulatory proteins are omitted from this index. Knowledge of location may be more exact than implied in the index—for example, in mitochondria as to matrix or membranes—and in many cases that is specified in the text.

For brevity, different proteins with the same alphabetic abbreviation may be listed as a single entry—often the several proteins in one pathway (as, e.g., Xyz1,3,4,7)—so neither the page listings nor the assignment to organelle need apply to each of the proteins. Or the entries may be separated by where the reactions are shown or by whether they are enzymatic or regulatory.

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Ayr1	er,l,m	307, 308
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Cox1-20,23-24	m	84 , 139, 145 , 146, 149, 155, 275, 276, 277, 319
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Crc1	m	191
Crd1	m	308 , 309
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Csh1	v	314
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Cyc2,3	m	145, 275, 277
Cyr1		52, 254 , 255, 360 , 362
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Cyt1,2	m	144, 145, 275, 276
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Dal7	c	189, 350
Dcd1	c	242, 243
Dci1	px	339
Ddp1	c	389
Dfr1	c,m	242, 243, 274 , 275
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Dld1	m	153, 174 , 177
Dpm1	er	264 , 266, 319
Dpp1	c,v	320, 321 , 322
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Fad1	cyt	278 , 279, 280
Fas1,2	c	282, 301, 304 , 305, 306, 307
Fat1	pm,px	337, 338
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Fbp1	c	52, 106, 107, 179 , 187, 188, 341
Fbp26		106 , 107, 109, 132
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Fum1	c,m	52, 174 , 176, 185
Fur1,4	c,pm	244, 245 , 246
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Gna1	c	264 , 266
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Gpm1	c	53, 96 , 112
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Gpp1,2	c	117 , 119
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Gpx1,2	c	383 , 385
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Gre3	c	333, 334 , 387, 390, 397
Grx1,2	c	242, 383 , 385
Gsh1,2	c	54, 280, 282, 385 , 387
Gsy1,2	c	265, 363, 364 , 365, 394
Gua1	c	253, 254 , 256
Gud1	c	255, 256
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Gut1	c,m	117 , 152, 177, 189, 190
Hap1		384
Hem1-4,12-15	c,m	275, 276 , 277
Hfa1	m	282
His1-7	c	52, 238, 239 , 240, 257
Hmg1,2	c	315, 318
Hnm1	pm	
Hog1		360 , 365, 372, 373, 379
Hom2,3,6	c	221, 222 , 223
Hpt1	c	255, 256
Hsf1		367
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Idh1,2	m	174 , 176, 185
Idi1	c	53, 315, 316
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Mae1	m	179 , 180, 181, 187, 189, 195, 196, 207
Mal11-13	c,pm	326 , 330
Mba1	m	146
Mct1	m	282
Mde1	c	229 , 230
Mdh1-3	c,m,p	174 , 176, 184, 185, 339
Mel		326 , 331
Mep1-3	pm	286, 296, 362, 394
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Ndi1	m	144, 152, 159, 162, 189, 190
Ndt1,2	m	76, 77, 78
Nfs1	m	293, 294
Nha1	pm	374, 375
Nhx1	er	374, 375, 377, 393
Nma1,2	c,m,n	267, 268
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Pan5,6	c	272, 273
Pcd1	px	389
Pck1	c	179, 180, 187
Pcl7,8,10	c	364, 365
Pcm1	c	264, 266, 329
Pct1	c	312
Pda1,2	m	174, 176, 190, 191
Pdc1,2,5,6	c	96, 115, 174, 175, 289, 348
Pde1,2	c	254, 255
Pdr12	pm	91, 379, 389
Pdx1	m	174, 176
Pdx3	c	270, 271
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Pfk1,2	c	96, 98, 99, 105, 106, 107, 109
Pfk26,27	c	106, 107, 108, 109, 110, 373
Pgi1	c	52, 96, 98, 99, 102, 103, 104, 121, 193, 200, 289
Pgk1	c	60, 96, 98, 99, 111, 112, 113, 292
Pgm1-3	c	264, 265, 326, 327, 328, 329, 354, 390
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Sec59	c,er	319, 320
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Ssy1	pm	360 , 362
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Stl1	pm	117 , 177, 372, 373, 395
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