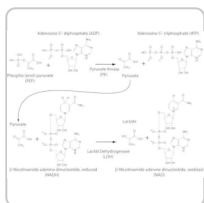


Brighten up your lab coat!

Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.


[GET YOURS HERE](#)

Toutes les
photos (1)

Documents



FDS



COO/COA



Fiche des
caractéristiques

P0294 ▶ **Sigma-Aldrich.**

Pyruvate Kinase/Lactic Dehydrogenase enzymes from rabbit muscle

★★★★★ (0)

For the Determination of ADP, buffered aqueous glycerol solution

Synonyme(s):

PK/LDH enzymes from rabbit muscle

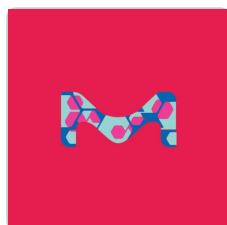
NACRES:

NA.54

Référence	Conditionnement	Disponibilité	Prix	Quantité
P0294-5ML	5 ML	Only 3 left in stock (more on the way)	Détails... 196,00 €	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931

Brighten up your lab coat!

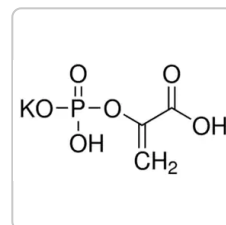
Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

[GET YOURS HERE](#)

Sigma-Aldrich

P1506**Pyruvate Kinase from rabbit muscle**

Type II, ammonium sulfate suspension, 350-600 units/mg protein

[Consulter le prix et la disponibilité](#)

Roche

10108294001**Phosphoenol-pyruvate**

97% (PEP-K), pkg of 1 g

[Consulter le prix et la disponibilité](#)

PROPRIÉTÉS

Niveau de qualité	100
Forme	buffered aqueous glycerol solution
Poids mol.	59 kDa
Concentration	600-1,000 units/mL pyruvate kinase 900-1400 units/mL lactic dehydrogenase
Temp. de stockage	-20°C

Brighten up your lab coat!

Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.



GET YOURS HERE



Description générale

Pyruvate Kinase from rabbit muscle is a metalloenzyme which catalyzes the conversion of phosphoenol pyruvate to pyruvate in the glycolysis pathway. It corresponds to a molecular weight of 59 kDa. It exists as a tetramer and undergoes conformational changes in the active site to accommodate substrate. Lactic dehydrogenase (LDH) catalyzes the lactate to pyruvate conversion in anaerobic glycolysis. It exists as tetramer and comprises of two subunits (H and M). The LDH of eukaryotes undergo active-site loop gating for their catalytic functionality.

Application

Pyruvate Kinase/Lactic Dehydrogenase enzymes from rabbit muscle has been used:

- for ATP generation in the active microtubule preparation
- in the enzyme linked ATPase assay of skeletal muscle heavy meromyosin (HMM)
- as a standard control for quantifying mesenchymal stem cells (MSCs) lactate dehydrogenase

Actions biochimiques/physiologiques

ADP Quantification Assay protocol for the use of PK/LDH in the determination of ADP. Solutions containing unknown concentrations of ADP can be substituted for reagent D in this protocol. Further dilutions of the ADP solution may be required

Lactate dehydrogenase from rabbit muscle can be inhibited by ascorbate. Aldolase and actin were shown to block this inhibitory effect.

Pyruvate kinase also catalyzes the phosphorylation of thiamine diphosphate (TDP) to thiamine triphosphate (TTP) which may find application in antiviral and tumor therapy.

Pyruvate kinase requires bivalent and monovalent cations such as Mg^{2+} and K^{+} respectively for activation to occur.

Brighten up your lab coat!

Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.

[GET YOURS HERE](#)**Forme physique**

Solution in 50% glycerol containing 10 mM HEPES, pH 7.0, 100 mM KCl and 0.1 mM EDTA

INFORMATIONS SUR LA SÉCURITÉ

Code de la classe de stockage

12 - Non Combustible Liquids

WGK

WGK 1

Flash Point(F)

Not applicable

Point d'éclair C

Not applicable

Équipement de protection individuelle

Eyeshields, Gloves, multi-purpose combination respirator cartridge (US)

DOCUMENTATION

Certificat d'analyse

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

Numéro de lot

Brighten up your lab coat!

Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.



GET YOURS HERE



Rechercher

Certificat d'origine

Saisir un numéro de lot pour rechercher un certificat d'origine (COO).

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (COO)

Rechercher

LES CLIENTS ONT ÉGALEMENT CONSULTÉ

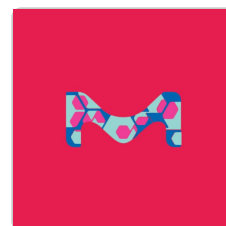


Roche

LLDH-RO

L-Lactate Dehydrogenase (L-LDH)

Consulter le prix et la disponibilité



Sigma-Aldrich

P1903

Pyruvate Kinase from *Bacillus stearothermophilus*

Type VIII, lyophilized powder, 100-300 units/mg protein

Consulter le prix et la disponibilité

Brighten up your lab coat!

Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.



GET YOURS HERE



Targeting Bcr-Abl by combining allosteric with ATP-binding-site inhibitors.

Jianming Zhang et al.

Nature, 463(7280), 501-506 (2010-01-15)

In an effort to find new pharmacological modalities to overcome resistance to ATP-binding-site inhibitors of Bcr-Abl, we recently reported the discovery of GNF-2, a selective allosteric Bcr-Abl inhibitor. Here, using solution NMR, X-ray crystallography, mutagenesis and hydrogen exchange mass spectrometry

The T790M mutation in EGFR kinase causes drug resistance by increasing the affinity for ATP.

Cai-Hong Yun et al.

Proceedings of the National Academy of Sciences of the United States of America, 105(6), 2070-2075 (2008-01-30)

Lung cancers caused by activating mutations in the epidermal growth factor receptor (EGFR) are initially responsive to small molecule tyrosine kinase inhibitors (TKIs), but the efficacy of these agents is often limited because of the emergence of drug resistance conferred

Ligand-Induced Domain Movement in Pyruvate Kinase: Structure of the Enzyme from Rabbit Muscle with Mg²⁺, K⁺, and I-Phospholactate at 2.7 Å Resolution

Larsen TM, et al.

Archives of Biochemistry and Biophysics, 345(2), 199-206 (1997)

Thermal activation of `allosteric-like?large-scale motions in a eukaryotic Lactate Dehydrogenase

Katava M, et al.

Scientific Reports, 7, 41092-41092 (2017)

Chemical and enzymatic characterization of recombinant rabbit muscle pyruvate kinase

Boehme C, et al.

Biological Chemistry, 394(5), 695-701 (2013)

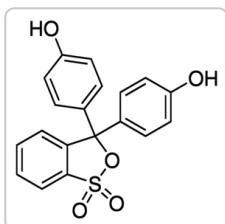
Afficher tous les articles scientifiques apparentés

Brighten up your lab coat!

Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.



GET YOURS HERE



Sigma-Aldrich

P0290

Phenol red solution

0.5%, liquid, sterile-filtered, BioReagent, suitable for cell culture

[Consulter le prix et la disponibilité](#)



Sigma-Aldrich

P0275

Poly(Glu, Tyr) sodium salt

Glu:Tyr (4:1), mol wt 20,000-50,000

[Consulter le prix et la disponibilité](#)

Évaluations



[Soyez le premier à donner votre avis sur ce produit](#)

Questions

[Soyez le premier à poser une question](#)

SERVICE TECHNIQUE

Notre équipe de scientifiques dispose d'une expérience dans tous les secteurs de la recherche, notamment en sciences de la vie,

Brighten up your lab coat!

Subscribe to our scientific newsletters and make your lab mates jealous with a shiny 'Magical Flask' pin.



GET YOURS HERE



Le contenu de cette page vous a-t-il été utile ?*



Que pouvons-nous faire pour améliorer cette page spécifique de notre site Internet ?

Envoyer

© 2022 Merck KGaA, Darmstadt, Allemagne et/ou ses sociétés affiliées. Tous droits réservés.

La reproduction d'une quelconque partie du contenu de ce site est strictement interdite sans autorisation.

[Conditions d'utilisation du site](#) | [Politique de confidentialité](#) | [Conditions générales de vente](#) | [Consentement relatif au copyright](#) | [Paramètres des cookies](#)