

# Recombinant Human 2-oxoglutarate dehydrogenase, mitochondrial(OGDH)

Catalog No: #AP70604

Package Size: #AP70604-1 20ug #AP70604-2 100ug #AP70604-3 1mg

## Description

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | Recombinant Human 2-oxoglutarate dehydrogenase, mitochondrial(OGDH)                                                                                                                                                                                                                                                                                                                                              |
| Host Species          | E.coli                                                                                                                                                                                                                                                                                                                                                                                                           |
| Purification          | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                      |
| Immunogen Description | Expression Region:41-427aaSequence Info:Full Length of Isoform 3                                                                                                                                                                                                                                                                                                                                                 |
| Other Names           | 2-oxoglutarate dehydrogenase complex component E1 ;OGDC-E1Alpha-ketoglutarate dehydrogenase                                                                                                                                                                                                                                                                                                                      |
| Accession No.         | Q02218                                                                                                                                                                                                                                                                                                                                                                                                           |
| Calculated MW         | 59.1 kDa                                                                                                                                                                                                                                                                                                                                                                                                         |
| Tag Info              | N-terminal 6xHis-SUMO-tagged                                                                                                                                                                                                                                                                                                                                                                                     |
| Target Sequence       | SAPVAAEPFLSGTSSNYVEEMYCAWLENPKSVHKSWDIFFRNTNAGAPPGTAYQSPLPLSRGSLAAVAHAQS<br>LVEAQPNDKLVEDHLAVQSLIRAYQIRGHHVAQLDPLGILDADLDSSVPADIISSTDKLGFYGLDESDLDKVFH<br>LPTTTFIGGQESALPLREIIRLEMAYCQHIGVEFMFINDLEQCQWIRQKFETPGIMQFTNEEKRTLRLVRST<br>RFEFLQRKWSSEKRFGLGCEVLIPALKTIIDKSSENGVDYVIMGMPHRGRLNVLNVIRKELEQIFCQFDSKL<br>EAADEGSGDVKYHLGMYHRRINRVTDNRITLSLVANPSHLEAADPVVMGKTKAEQFYCGDTEGKKVRPRERR<br>ARQIVKAPCSSMEFRSPT |
| Formulation           | Tris-based buffer50% glycerol                                                                                                                                                                                                                                                                                                                                                                                    |
| Storage               | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br><br>Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                  |

## Background

The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO<sub>2</sub>. It contains multiple copies of three enzymatic components: 2-oxoglutarate dehydrogenase (E1), dihydrolipoamide succinyltransferase (E2) and lipoamide dehydrogenase (E3).

## References

The DNA sequence of human chromosome 7.Hillier L.W., Fulton R.S., Fulton L.A., Graves T.A., Pepin K.H., Wagner-McPherson C., Layman D., Maas J., Jaeger S., Walker R., Wylie K., Sekhon M., Becker M.C., O'Laughlin M.D., Schaller M.E., Fewell G.A., Delehaunty K.D., Miner T.L., Nash W.E., Cordes M., Du H., Sun H., Edwards J., Bradshaw-Cordum H., Ali J., Andrews S., Isak A., Vanbrunt A., Nguyen C., Du F., Lamar B., Courtney L., Kalicki J., Ozersky P., Bielicki L., Scott K., Holmes A., Harkins R., Harris A., Strong C.M., Hou S., Tomlinson C., Dauphin-Kohlberg S., Kozlowicz-Reilly A., Leonard S., Rohlfing T., Rock S.M., Tin-Wollam A.-M., Abbott A., Minx P., Maupin R., Strowmatt C., Latreille P., Miller N., Johnson D., Murray J., Woessner J.P., Wendl M.C., Yang S.-P., Schultz B.R., Wallis J.W., Spieth J., Bieri T.A., Nelson J.O., Berkowicz N., Wohldmann P.E., Cook L.L., Hickenbotham M.T., Eldred J., Williams D., Bedell J.A., Mardis E.R., Clifton S.W., Chisoe S.L., Marra M.A., Raymond C., Haugen E., Gillett W., Zhou Y., James R., Phelps K., Iadamoto S., Bubb K., Simms E., Levy R., Clendenning J., Kaul R., Kent W.J., Furey T.S., Baertsch R.A., Brent M.R., Keibler E., Flicek P., Bork P., Suyama M., Bailey J.A., Portnoy M.E., Torrents D., Chinwalla A.T., Gish W.R., Eddy S.R., McPherson J.D., Olson M.V., Eichler E.E., Green E.D., Waterston R.H., Wilson R.K.Nature 424:157-164(2003)Research Topic:Metabolism

---

Note: This product is for in vitro research use only and is not intended for use in humans or animals.