

YTHDC1 Knockout HEK293T RIPA Lysate

| 产品编号 | 产品名称 | 包装 |
|--------|-------------------------------------|-------|
| L02673 | YTHDC1 Knockout HEK293T RIPA Lysate | 100µg |

产品简介:

- YTHDC1 Knockout HEK293T RIPA Lysate (YTHDC1基因敲除HEK293T细胞RIPA裂解液)是通过同时表达Cas9、目的基因sgRNA和puromycin抗性基因并实现了目的基因CRISPR敲除的多克隆HEK293T细胞的RIPA裂解液。该细胞中目的基因的敲除已经通过T7EI法的验证。本产品可用于该目的基因敲除后其信号通路相关蛋白的研究,也可以用于该基因相应抗体的验证。
- 本RIPA裂解液源于可同时表达Cas9、目的基因sgRNA和puromycin抗性基因的慢病毒感染HEK293T细胞并经过puromycin筛选后获得的多克隆细胞。制备该细胞的相应慢病毒的基因序列的关键图谱信息请参考图1。



图1. 可同时表达sgRNA、Cas9和puromycin抗性的慢病毒其基因序列的关键图谱信息。

- 该细胞中目的基因的敲除已经通过T7EI法的验证。
- 由于本细胞是通过CRISPR/Cas9技术获得的多克隆细胞,基于CRISPR/Cas9技术的特点,理论上平均有2/3的细胞发生移码突变而导致了目的基因的敲除,平均有1/3的细胞并未发生移码突变。很多情况下有约2/3的细胞发生目的基因的敲除,已经足以进行很多的目的基因的生物学功能的研究了。如果希望获得100%基因敲除的细胞,可以自行使用本产品筛选单克隆细胞,或者委托碧云天进行单克隆细胞株的筛选服务。
- 本RIPA裂解液用于实验时,建议同时选购无任何靶向的对照细胞RIPA裂解液Control Knockout HEK293T RIPA Lysate (L00025)或靶向GFP的对照RIPA裂解液GFP Knockout HEK293T RIPA Lysate (L00027)。
- 碧云天同时提供基于CRISPR/Cas9技术的YTHDC1基因敲除的质粒(L02670 pLenti-YTHDC1-sgRNA)、慢病毒(L02671 YTHDC1 Knockout Lentivirus)、HEK293T细胞(L02672 YTHDC1 Knockout HEK293T Cells)、HEK293T敲除细胞的RIPA裂解液(L02673 YTHDC1 Knockout HEK293T RIPA Lysate)、HEK293T敲除细胞的Trizol裂解液(L02674 YTHDC1 Knockout HEK293T Trizol Lysate)等产品,具体请在碧云天网站查询或在本产品网页点击相应产品。
- 用于制备本产品的RIPA裂解液为碧云天生产的P0013B RIPA裂解液(强),其具体组分请查阅产品网页或说明书。
- YTHDC1基因的基本信息如下:

| Species | Gene Symbol | Gene ID | GenBank Accession | Transcript |
|---------|-------------|---------|-------------------|------------|
| Human | YTHDC1 | 91746 | BC041119 | NM_133370 |

| About the gene | |
|--------------------|--|
| Official Symbol | YTHDC1 |
| Previous Symbol | - |
| Official Full Name | YTH domain containing 1 |
| Synonyms | YT521; KIAA1966; YT521-B |
| Location | 4q13.2 |
| Gene Type | protein-coding gene |
| Uniprot ID | Q96MU7 |
| Pathway/Library | m6A Modification Related Genes Library |
| Gene Summary | Regulator of alternative splicing that specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs (PubMed:26318451, PubMed:26876937, PubMed:25242552, PubMed:28984244). M6A is a modification present at internal sites of mRNAs and some non-coding RNAs and plays a role in the efficiency of mRNA splicing, processing and stability (PubMed:26318451, PubMed:25242552). Acts as a key regulator of exon-inclusion or exon-skipping during alternative splicing via interaction with mRNA splicing factors SRSF3 and SRSF10 (PubMed:26876937). Specifically binds m6A-containing mRNAs and promotes recruitment of SRSF3 to its mRNA-binding elements adjacent to |

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| | m6A sites, leading to exon-inclusion during alternative splicing (PubMed:26876937). In contrast, interaction with SRSF3 prevents interaction with SRSF10, a splicing factor that promotes exon skipping: this prevents SRSF10 from binding to its mRNA-binding sites close to m6A-containing regions, leading to inhibit exon skipping during alternative splicing (PubMed:26876937). May also regulate alternative splice site selection (PubMed:20167602). Also involved in nuclear export of m6A-containing mRNAs via interaction with SRSF3: interaction with SRSF3 facilitates m6A-containing mRNA-binding to both SRSF3 and NXF1, promoting mRNA nuclear export (PubMed:28984244). Also recognizes and binds m6A on other RNA molecules (PubMed:27602518). Involved in random X inactivation mediated by Xist RNA: recognizes and binds m6A-containing Xist and promotes transcription repression activity of Xist (PubMed:27602518). Involved in S-adenosyl-L-methionine homeostasis by regulating expression of MAT2A transcripts, probably by binding m6A-containing MAT2A mRNAs (By similarity). YTDC1_HUMAN,Q96MU7 |
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包装清单:

| 产品编号 | 产品名称 | 包装 |
|--------|-------------------------------------|-------|
| L02673 | YTHDC1 Knockout HEK293T RIPA Lysate | 100µg |
| — | 说明书 | 1份 |

保存条件:

-20°C保存, 3个月有效; -80°C保存, 至少一年有效。

注意事项:

- 碧云天拥有sgRNA序列的知识产权, 如果需要sgRNA序列, 请在订购后发送邮件向info@beyotime.com索取。sgRNA序列信息与本产品, 未经碧云天书面许可不得用于任何商业用途, 也不得移交给订货人所在实验室外的任何个人或单位。使用者在发表研究论文或结果时, 应注明来源。
- 对于非目录产品的CRISPR基因敲除细胞RIPA裂解液的定制, 可联系碧云天技术服务service@beyotime.com。
- 本产品仅限于专业人员的科学研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

使用说明:

1. 细胞RIPA裂解液样品的蛋白浓度测定:

推荐使用碧云天生产的BCA蛋白浓度测定试剂盒(P0009/P0010/P0010S/P0011/P0012/P0012S)测定蛋白浓度。由于本产品含有较高浓度的去垢剂, 不建议使用Bradford法测定本产品的蛋白浓度。RIPA裂解液的使用说明请参考:
<https://www.beyotime.com/product/P0013B.htm>。

2. 细胞RIPA裂解液的使用:

本RIPA裂解液测定浓度后加入SDS-PAGE蛋白上样缓冲液即可用于SDS-PAGE、Western检测、以及目的基因抗体的验证等。

相关产品:

| 产品编号 | 产品名称 | 包装 |
|----------|--------------------------------------|-----------|
| L00025 | Control Knockout HEK293T RIPA Lysate | 100µg |
| L00027 | GFP Knockout HEK293T RIPA Lysate | 100µg |
| P0009 | BCA蛋白浓度测定试剂盒(增强型) | 5000次 |
| P0010 | BCA蛋白浓度测定试剂盒(增强型) | 500次 |
| P0010S | BCA蛋白浓度测定试剂盒(增强型) | 200次 |
| P0011 | BCA蛋白浓度测定试剂盒 | 5000次 |
| P0012 | BCA蛋白浓度测定试剂盒 | 500次 |
| P0012S | BCA蛋白浓度测定试剂盒 | 200次 |
| P0012A | SDS-PAGE凝胶配制试剂盒 | 可制30-50块胶 |
| P0012AC | SDS-PAGE凝胶快速配制试剂盒 | 可制30-50块胶 |
| P0013B | RIPA裂解液(强) | 100ml |
| P0014A/B | SDS-PAGE电泳液(Tris-Gly, Powder) | 1/10L |
| P0014C/D | SDS-PAGE电泳液(Tris-Gly, 10X) | 100/500ml |
| P0015 | SDS-PAGE蛋白上样缓冲液(5X) | 2ml |
| P0015L | SDS-PAGE蛋白上样缓冲液(5X) | 15ml |
| P0015B | SDS-PAGE蛋白上样缓冲液(2X) | 5ml |
| P0015F | SDS-PAGE蛋白上样缓冲液(6X) | 2ml |

