

TRIM48 Knockout HEK293T RIPA Lysate

产品编号	产品名称	包装
L10883	TRIM48 Knockout HEK293T RIPA Lysate	100µg

产品简介:

- TRIM48 Knockout HEK293T RIPA Lysate (TRIM48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T7E1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T7E1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的功能的研究了。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TRIM48基因敲除的质粒(L10880 pLenti-TRIM48-sgRNA)、慢病毒(L10881 TRIM48 Knockout Lentivirus)、HEK293T细胞(L10882 TRIM48 Knockout HEK293T Cells)、HEK293T敲除细胞的RIPA裂解液(L10883 TRIM48 Knockout HEK293T RIPA Lysate)、HEK293T敲除细胞的Trizol裂解液(L10884 TRIM48 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。
- TRIM48基因的基本信息如下:

Species	Gene Symbol	Gene ID	GenBank Accession	Transcript
Human	TRIM48	79097	BC001862	NM_024114

About the gene	
Official Symbol	TRIM48
Previous Symbol	-
Official Full Name	tripartite motif containing 48
Synonyms	RNF101
Location	11q11
Gene Type	protein-coding gene
Uniprot ID	Q8IWZ4
Pathway/Library	Ubiquitin Ligases Genes Library
Gene Summary	Tripartite motif (TRIM) proteins have been increasingly appreciated as important antiviral factors that suppress the replication of a wide range of RNA and DNA viruses. TRIM proteins inhibit viral replication by either directly targeting viral components or modulating innate immune responses that result in antiviral gene expression. For example, TRIM19 (also known as promyelocytic leukemia protein (PML)) restricts multiple RNA viruses and DNA viruses, including herpesviruses, by organizing PML nuclear bodies. Several TRIM proteins that suppress KSHV reactivation. Tripartite motif 48 (TRIM48) as a candidate E3 ubiquitin ligase that regulates ASK1. TRIM48 has a RING-finger motif with E3 ubiquitin ligase activity and belongs to the TRIM family. TRIM family is characterized by three conserved domains

	or motifs (a RING-finger motif, a B-box domain, and a coiled-coil domain), whereas TRIM48 lacks the coiled-coil domain. The TRIM family comprises nearly 100 members in humans, and several of these proteins have been reported to function as E3 ubiquitin ligases that mediate a wide range of biological functions, such as cell death and innate immune responses. Several TRIM genes in the TRIM family are conserved only in primates (humans and African apes). These genes arose during primate evolution through segmental duplication. Notably, TRIM48 is one of the 7 human-specific genes. TRIM48 promotes ASK1 activation through ubiquitination-dependent degradation of a negative regulator of ASK1 activation, protein arginine methyltransferase 1 (PRMT1). Knocking down TRIM48 suppressed oxidative-stress-induced cell death mediated by ASK1, and the additional knockdown of PRMT1 reversed this suppression of cell death. Furthermore, forced expression of TRIM48 impaired xenograft tumor growth, accompanied by increased cell death.
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包装清单:

产品编号	产品名称	包装
L10883	TRIM48 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

