



Promega

药物：靶点相互作用检测

NanoBRET™ Target Engagement (TE) Assay



欢迎关注 Promega 官方微信

技术简介

Introduction

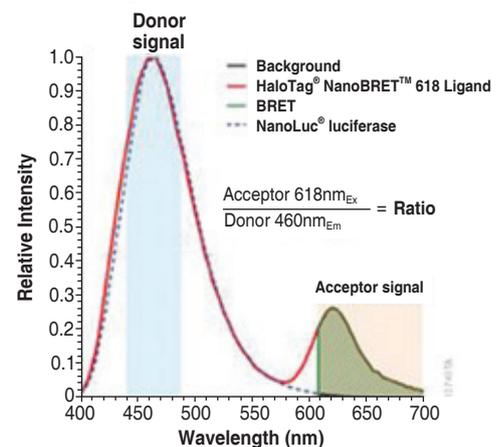
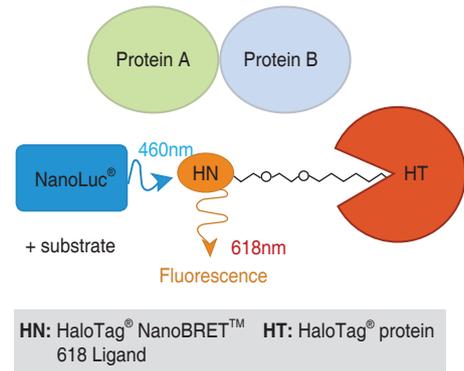
小分子结合并调控靶蛋白活性的发展对理解生物学和治疗疾病非常至关重要。生物发光能量共振转移 (BRET) 的应用使得在活细胞内定量检测一个小分子和蛋白之间的相互作用成为可能。某些情况下, 这一方法甚至可以实时检测这些相互作用, 不仅能研究相互作用的形成, 而且能研究相关组分的分离。

» NanoBRET™ 技术

是大幅度改良的 BRET (bioluminescence resonance energy transfer, 生物发光共振能量转移) 分析平台, 可在活细胞内研究蛋白: 蛋白相互作用。该技术使用 NanoLuc® 萤光素酶作为能量供体和 HaloTag® 蛋白标记的 NanoBRET™ 618 荧光基团作为受体。来自 NanoLuc® 供体的明亮的蓝移发光信号耦合到远红移的 HaloTag® 受体上后, 光谱叠加更佳、信号更强、且与传统 BRET 分析相比背景更低。

» 应用 BRET 研究配体

蛋白相互作用依赖能量从作为 BRET 供体的标记蛋白的萤光素酶转移到作为 BRET 受体的另一荧光标记的配体上。能量的转移受两者接近程度的调控。作为 BRET 供体的 NanoLuc® Luciferase, 由于其光信号非常强、蛋白分子小, 因而具有独特的优势。NanoLuc® Luciferase 可使用多种荧光基团作为 BRET 受体。



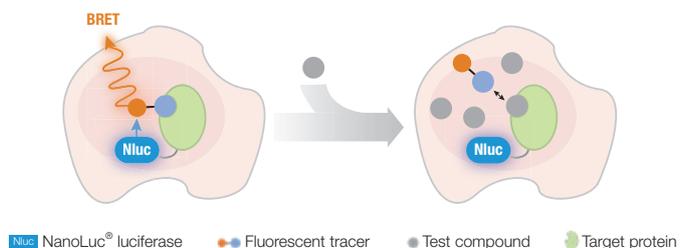
NanoBRET™ Target Engagement (TE) Assay

在完整细胞中检测化合物和特定靶点实时的相互作用

NanoBRET™ TE 检测系统原理

系统中 NanoBRET™ tracer 可以透过细胞膜, 进入细胞与 NanoLuc®- 靶点融合蛋白相互作用产生 BRET 现象, 当待测药物与靶点蛋白存在相互作用时, 由于药物与 tracer 竞争结合, BRET 信号减弱。

通过 NanoBRET™ TE 检测系统可以检测活细胞水平的药物与靶点的亲和力以及药物膜通透性。



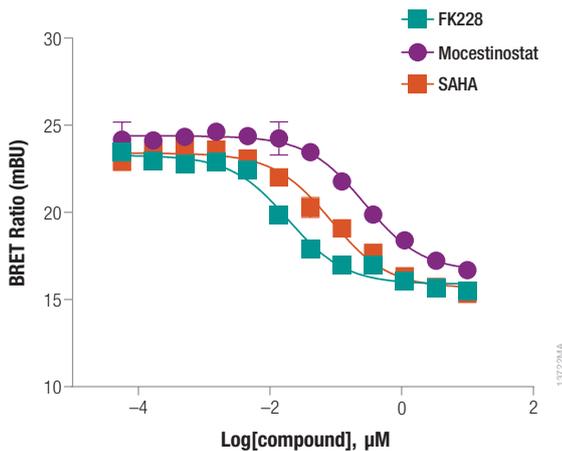
特点及操作流程

Features and protocols

» NanoBRET™ TE Assay 特点

- 活细胞相互作用
- 活细胞内监测化合物：靶标滞留时间
- 适合高通量筛选
- 预构建载体，激酶 TE 系统适合上百种激酶

应用举例：HDAC1-NanoLuc® 全长融合蛋白滞留时间分析中的最佳化合物处理浓度的确定。

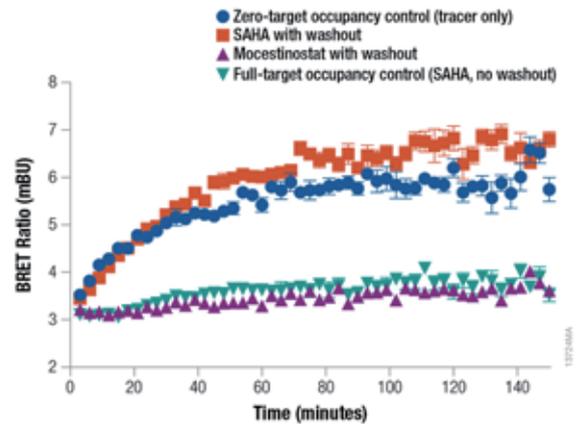


上图：表达有 HDAC1-NanoLuc® 全长融合蛋白的 HeLa 细胞以培养基重悬，与不同浓度 SAHA 或 mocetinostat 结合并孵育培养 2 小时。洗涤细胞，然后将细胞铺在 96 孔板中，20X NanoBRET™ Tracer 和 2X NanoBRET™ Nano-Glo® Substrate 加 Extracellular NanoLuc® Inhibitor Solution 加入每个孔。使用带有 NanoBRET™ 618 滤片 (donor 450nm/8nm BP 和 acceptor 600nm LP) GloMax® Discover System 检测 BRET。

» NanoBRET™ TE Assay 中四种关键的组分

- 细预构建 NanoLuc® - 靶点融合蛋白载体
- NanoBRET™ tracer(胞膜通透性的荧光示踪探针)
- 细胞膜通透性 NanoLuc® luciferase 抑制剂
- NanoLuc® luciferase 底物

应用举例：瞬时转染表达有 HDAC1-NanoLuc® 全长融合蛋白的 HeLa 细胞的滞留时间分析



上图：表达 HDAC1-NanoLuc® 全长融合蛋白的 HeLa 细胞以培养基重悬，以 10μM SAHA 或 10μM mocetinostat 结合并孵育 2 小时。去掉化合物后，细胞铺在 96 孔板中，Complete 20X NanoBRET™ Tracer and 2X NanoBRET™ Nano-Glo® Substrate plus Extracellular NanoLuc® Inhibitor Solution 加入到每个孔中。使用带有 NanoBRET™ 618 滤片 (donor 450nm/8nm BP 和 acceptor 600nm LP) GloMax® Discover System 反复检测 BRET。

» NanoBRET™ TE Assay 简要操作流程



检测 BRET



GloMax® Discover System

商品化活细胞水平Target Engagement产品资料

- 手机扫描右侧二维码或点击产品名称可直接浏览产品网页了解详细产品信息
- 定制产品请直接联系 Promega

检测 **BET BRD**
相关药物

NanoBRET™ Target Engagement BET BRD Assays
检测完整细胞内化合物与 BET 溴结构域靶蛋白的结合。



检测 **HDAC**
相关药物

NanoBRET™ Target Engagement HDAC Assays
检测完整细胞内化合物与 HDAC 靶蛋白的结合。



检测 **Kinase**
相关药物

NanoBRET Target Engagement Intracellular Kinase Assay
检测在完整细胞中化合物和特定靶点激酶的结合。适合上百种激酶。



产品列表

Product List

检测 Kinase 相关药物

NanoBRET™ TE 试剂盒

产品	规格	目录号
NanoBRET™ TE Intracellular Kinase Assay, K-4	100 assays	N2520
	1000 assays	N2521
NanoBRET™ TE Kinase Detection Reagents, K-4 (No control DNA)	10000 assays	N2540
NanoBRET™ TE Intracellular Kinase Assay, K-5	100 assays	N2500
	1000 assays	N2501
NanoBRET™ TE Kinase Detection Reagents, K-5 (No control DNA)	10000 assays	N2530

NanoBRET™ TE 融合蛋白载体 (蛋白英文字母 A-C 排序): 产品目录号请咨询 Promega

产品	规格	产品	规格	产品	规格	产品	规格
AAK1	20ug	ANKK1	20ug	CASK	20ug	CDK5 + Cyc E1	20ug
AATK	20ug	ARAF	20ug	CDC42BPA	20ug	CDK6 + Cyc D1	20ug
ABL1	20ug	ATR	20ug	CDC42BPB	20ug	CDK6 + Cyc D3	20ug
ABL1(E255K)	20ug	AURKA	20ug	CDC42BPG	20ug	CDK7	20ug
ABL1(F317I)	20ug	AURKB	20ug	CDC7	20ug	CDK7 + Cyc H	20ug
ABL1(F317L)	20ug	AURKC	20ug	CDK1 + Cyc B1	20ug	CDK8 + Cyc C	20ug
ABL1(H396P)	20ug	AXL	20ug	CDK1 + Cyc B2	20ug	CDK9 + Cyc K	20ug
ABL1(M351T)	20ug	BCKDK	20ug	CDK1 + Cyc E1	20ug	CDK9 + Cyc T1	20ug
ABL1(Q252H)	20ug	BCR	20ug	CDK1 + Cyc K	20ug	CDKL1	20ug
ABL1(T315I)	20ug	BLK	20ug	CDK10 + Cyc L2	20ug	CDKL2	20ug
ABL1(Y253F)	20ug	BMP2K	20ug	CDK11A + Cyc K	20ug	CDKL3	20ug
ABL2	20ug	BMPR1A	20ug	CDK11A + Cyc L2	20ug	CDKL4	20ug
ACVR1	20ug	BMPR1B	20ug	CDK11B	20ug	CDKL5	20ug
ACVR1B	20ug	BMPR2	20ug	CDK12 + Cyc K	20ug	CERK	20ug
ACVR1C	20ug	BMX	20ug	CDK13 + Cyc K	20ug	CHEK1	20ug
ACVR2A	20ug	BRAF	20ug	CDK14 + Cyc Y	20ug	CHEK2	20ug
ACVR2B	20ug	BRSK1	20ug	CDK15 + Cyc Y	20ug	CHUK	20ug
ACVRL1	20ug	BRSK2	20ug	CDK16 + Cyc Y	20ug	CKB	20ug
ADCK1	20ug	BTK	20ug	CDK17 + Cyc Y	20ug	CKM	20ug
ADCK2	20ug	BUB1	20ug	CDK18 + Cyc Y	20ug	CKMT2	20ug
ADCK5	20ug	BUB1B	20ug	CDK19 + Cyc C	20ug	CLK1	20ug
ADK	20ug	CAMK1	20ug	CDK2	20ug	CLK2	20ug
ADPGK	20ug	CAMK1D	20ug	CDK2 + Cyc A1	20ug	CLK3	20ug
ADRBK1	20ug	CAMK1G	20ug	CDK2 + Cyc A2	20ug	CLK4	20ug
AKT1	20ug	CAMK2A	20ug	CDK2 + Cyc E1	20ug	COASY	20ug
AKT2	20ug	CAMK2B	20ug	CDK20 + Cyc H	20ug	COQ8A	20ug
AKT3	20ug	CAMK2D	20ug	CDK3 + Cyc E1	20ug	COQ8B	20ug
ALK	20ug	CAMK2G	20ug	CDK4 + Cyc D1	20ug	CRAF	20ug
ALK(C1156Y)	20ug	CAMK4	20ug	CDK4 + Cyc D3	20ug	CSF1R	20ug
ALK(L1196M)	20ug	CAMKK1	20ug	CDK5	20ug	CSK	20ug
ALPK2	20ug	CAMKK2	20ug	CDK5 + CDK5R1	20ug	CSNK1A1	20ug
AMHR2	20ug	CAMKV	20ug	CDK5 + CDK5R2	20ug	CSNK1A1L	20ug

产品列表

Product List

» 检测 Kinase 相关药物

NanoBRET™ TE 融合蛋白载体 (蛋白英文字母 C-M 排序): 产品目录号请咨询 Promega.

产品	规格	产品	规格	产品	规格	产品	规格
CSNK1D	20ug	EPHA10	20ug	GRK3	20ug	KIT(D816V)	20ug
CSNK1E	20ug	EPHA2	20ug	GRK4	20ug	KIT(L576P)	20ug
CSNK1G1	20ug	EPHA3	20ug	GRK5	20ug	KIT(V559D)	20ug
CSNK1G2	20ug	EPHA4	20ug	GRK6	20ug	KIT(V559D,T670I)	20ug
CSNK1G3	20ug	EPHA5	20ug	GRK7	20ug	KIT(V559D,V654A)	20ug
CSNK2A1	20ug	EPHA6	20ug	GSG2	20ug	KSR1	20ug
CSNK2A2	20ug	EPHA7	20ug	GSK3A	20ug	KSR2	20ug
DAPK1	20ug	EPHA8	20ug	GSK3B	20ug	LATS1	20ug
DAPK2	20ug	EPHB1	20ug	GUCY2D	20ug	LATS2	20ug
DAPK3	20ug	EPHB2	20ug	GUK1	20ug	LCK	20ug
DCK	20ug	EPHB3	20ug	HCK	20ug	LIMK1	20ug
DCLK1	20ug	EPHB4	20ug	HIPK1	20ug	LIMK2	20ug
DCLK2	20ug	EPHB6	20ug	HIPK2	20ug	LMTK2	20ug
DCLK3	20ug	ERBB2	20ug	HIPK3	20ug	LMTK3	20ug
DDR1	20ug	ERBB3	20ug	HIPK4	20ug	LRGUK	20ug
DDR2	20ug	ERBB4	20ug	HUNK	20ug	LRRK1	20ug
DGKA	20ug	ERN1	20ug	ICK	20ug	LRRK2	20ug
DMPK	20ug	ERN2	20ug	IGF1R	20ug	LRRK2(G2019S)	20ug
DSTYK	20ug	FASTK	20ug	IGF2R	20ug	LTK	20ug
DYRK1A	20ug	FER	20ug	IKBKB	20ug	LYN	20ug
DYRK1B	20ug	FES	20ug	IKBKE	20ug	MAG11	20ug
DYRK2	20ug	FGFR1	20ug	ILK	20ug	MAG12	20ug
DYRK3	20ug	FGFR2	20ug	INSR	20ug	MAK	20ug
DYRK4	20ug	FGFR3	20ug	IRAK1	20ug	MAP2K1	20ug
EEF2K	20ug	FGFR3(G697C)	20ug	IRAK2	20ug	MAP2K2	20ug
EGFR	20ug	FGFR4	20ug	IRAK3	20ug	MAP2K3	20ug
EGFR(E746-A750del)	20ug	FGR	20ug	IRAK4	20ug	MAP2K4	20ug
EGFR(G719C)	20ug	FLT1	20ug	ITK	20ug	MAP2K5	20ug
EGFR(G719S)	20ug	FLT3	20ug	ITPK1	20ug	MAP2K6	20ug
EGFR(L747-E749del, A750P)	20ug	FLT3(D835H)	20ug	ITPKA	20ug	MAP2K7	20ug
EGFR(L747-S752del, P753S)	20ug	FLT3(D835V)	20ug	JAK1	20ug	MAP3K10	20ug
EGFR(L858R)	20ug	FLT3(D835Y)	20ug	JAK2	20ug	MAP3K11	20ug
EGFR(L858R, T790M)	20ug	FLT3(K663Q)	20ug	JAK2 (V617F)	20ug	MAP3K12	20ug
EGFR(L861Q)	20ug	FLT3(N841I)	20ug	JAK2_JH1 Domain	20ug	MAP3K13	20ug
EGFR(S752-I759del)	20ug	FLT3(R834Q)	20ug	JAK2_JH2 Domain	20ug	MAP3K14	20ug
EGFR(T790M)	20ug	FRK	20ug	JAK3	20ug	MAP3K19	20ug
EIF2AK1	20ug	FYN	20ug	JNK1	20ug	MAP3K2	20ug
EIF2AK2v1	20ug	GAK	20ug	JNK3	20ug	MAP3K21	20ug
EIF2AK2v2	20ug	GALK1	20ug	KDR	20ug	MAP3K3	20ug
EIF2AK4	20ug	GALK2	20ug	KHK	20ug	MAP3K4	20ug
EIF2AK4k1	20ug	GCK	20ug	Kit	20ug	MAP3K5	20ug
EIF2AK4k2	20ug	GK2	20ug	KIT(A829P)	20ug	MAP3K6	20ug
EPHA1	20ug	GRK1	20ug	KIT(D816H)	20ug	MAP3K7	20ug

产品列表

Product List

» 检测 Kinase 相关药物

NanoBRET™ TE 融合蛋白载体 (蛋白英文字母 M-R 排序): 产品目录号请咨询 Promega.

产品	规格	产品	规格	产品	规格	产品	规格
MAP3K8	20ug	MTOR	20ug	PDK2	20ug	PKDCC	20ug
MAP3K9	20ug	MUSK	20ug	PDK3	20ug	PKMYT1	20ug
MAP4K1	20ug	MYLK	20ug	PDK4	20ug	PKN1	20ug
MAP4K2	20ug	MYLK2	20ug	PDPK1	20ug	PKN2	20ug
MAP4K3	20ug	MYLK3	20ug	PEAK1	20ug	PKN3	20ug
MAP4K4	20ug	MYLK4	20ug	PFKB1	20ug	PLK1	20ug
MAP4K5	20ug	NEK1	20ug	PGK1	20ug	PLK2	20ug
MAPK1	20ug	NEK10	20ug	PGK2	20ug	PLK3	20ug
MAPK11	20ug	NEK11	20ug	PHKG1	20ug	PLK4	20ug
MAPK12	20ug	NEK2	20ug	PHKG2	20ug	PNCK	20ug
MAPK13	20ug	NEK3	20ug	PI4K2A	20ug	POMK	20ug
MAPK14	20ug	NEK4	20ug	PI4K2B	20ug	PRKAA1	20ug
MAPK3	20ug	NEK5	20ug	PI4KA	20ug	PRKAA2	20ug
MAPK4	20ug	NEK6	20ug	PI4KB	20ug	PRKACA	20ug
MAPK6	20ug	NEK7	20ug	PIK3C2A	20ug	PRKACB	20ug
MAPK7	20ug	NEK9	20ug	PIK3C2B	20ug	PRKACG	20ug
MAPK8	20ug	NIM1K	20ug	PIK3C3	20ug	PRKCB	20ug
MAPK9	20ug	NLK	20ug	PIK3CA	20ug	PRKCD	20ug
MAPKAPK2	20ug	NPR1	20ug	PIK3CA(C420R)	20ug	PRKCE	20ug
MAPKAPK3	20ug	NPR2	20ug	PIK3CA(E542K)	20ug	PRKCG	20ug
MAPKAPK5	20ug	NRBP1	20ug	PIK3CA(E545A)	20ug	PRKCH	20ug
MARK1	20ug	NRBP2	20ug	PIK3CA(E545K)	20ug	PRKCI	20ug
MARK2	20ug	NRK	20ug	PIK3CA(H1047L)	20ug	PRKCCQ	20ug
MARK3	20ug	NTRK1v1	20ug	PIK3CA(H1047R)	20ug	PRKCZ	20ug
MARK4	20ug	NTRK1v2	20ug	PIK3CA(H1047Y)	20ug	PRKD1	20ug
MAST1	20ug	NTRK2	20ug	PIK3CA(I800L)	20ug	PRKD2	20ug
MAST3	20ug	NTRK3	20ug	PIK3CA(M1043I)	20ug	PRKD3	20ug
MAST4	20ug	NUAK1	20ug	PIK3CA(Q546K)	20ug	PRKG1	20ug
MASTL	20ug	NUAK2	20ug	PIK3CB	20ug	PRKG2	20ug
MATK	20ug	OXSR1	20ug	PIK3CD	20ug	PRKRA	20ug
MEK5	20ug	PAK1	20ug	PIK3CG	20ug	PRKX	20ug
MELK	20ug	PAK2	20ug	PIKFYVE	20ug	PRKY	20ug
MERTK	20ug	PAK3	20ug	PIM1	20ug	PRPF4B	20ug
MET	20ug	PAK4	20ug	PIM2	20ug	PSKH1	20ug
MET(M1250T)	20ug	PAK6	20ug	PIM3	20ug	PSKH2	20ug
MET(Y1235D)	20ug	PAK7	20ug	PINK1	20ug	PTK2	20ug
MINK1	20ug	PANK3	20ug	PIP4K2A	20ug	PTK2B	20ug
MKNK1	20ug	PASK	20ug	PIP4K2B	20ug	PTK6	20ug
MKNK2	20ug	PBK	20ug	PIP4K2C	20ug	PXK	20ug
MLKL	20ug	PDGFRA	20ug	PIP5K1A	20ug	RAF1	20ug
MLTK	20ug	PDGFRB	20ug	PIP5K1B	20ug	RET	20ug
MOK	20ug	PDIK1L	20ug	PIP5K1C	20ug	RET(M918T)	20ug
MOS	20ug	PDK1	20ug	PKCa	20ug	RET(V804L)	20ug

产品列表

Product List

» 检测 Kinase 相关药物

NanoBRET™ TE 融合蛋白载体 (蛋白英文字母 R-Z 排序): 产品目录号请咨询 Promega.

产品	规格	产品	规格	产品	规格	产品	规格
RET(V804M)	20ug	SRC	20ug	TIE1	20ug	WNK2	20ug
RIOK1	20ug	SRMS	20ug	TIE2	20ug	WNK3	20ug
RIOK2	20ug	SRPK1	20ug	TK1	20ug	YES1	20ug
RIOK3	20ug	SRPK2	20ug	TK2	20ug	YSK4	20ug
RIPK1	20ug	STK10	20ug	TLK1	20ug	ZAP70	20ug
RIPK2	20ug	STK11	20ug	TLK2	20ug		
RIPK3	20ug	STK16	20ug	TNIK	20ug		
RIPK4	20ug	STK17A	20ug	TNK1	20ug		
RNASEL	20ug	STK17B	20ug	TNK2	20ug		
ROCK1	20ug	STK19	20ug	TNNI3K	20ug		
ROCK2	20ug	STK24	20ug	TP53RK	20ug		
RON	20ug	STK25	20ug	TPK1	20ug		
ROR1	20ug	STK26	20ug	TRIB1	20ug		
ROR2	20ug	STK3	20ug	TRIB2	20ug		
RPS6KA1	20ug	STK31	20ug	TRIB3	20ug		
RPS6KA2	20ug	STK32A	20ug	TRIO	20ug		
RPS6KA3	20ug	STK32B	20ug	TRKA	20ug		
RPS6KA4	20ug	STK32C	20ug	TSSK1B	20ug		
RPS6KA5	20ug	STK33	20ug	TSSK2	20ug		
RPS6KA6	20ug	STK35	20ug	TSSK3	20ug		
RPS6KB1	20ug	STK36	20ug	TSSK4	20ug		
RPS6KB2	20ug	STK38	20ug	TSSK6	20ug		
RPS6KL1	20ug	STK38L	20ug	TTBK1	20ug		
RYK	20ug	STK39	20ug	TTBK2	20ug		
SBK1	20ug	STK4	20ug	TTK	20ug		
SBK2	20ug	STK40	20ug	TXK	20ug		
SBK3	20ug	STKLD1	20ug	TYK2	20ug		
SCYL1	20ug	STRADA	20ug	TYK2_JH1 Domain	20ug		
SCYL2	20ug	STRADB	20ug	TYK2_JH2 Domain	20ug		
SCYL3	20ug	STYK1	20ug	TYRO3	20ug		
SGK1	20ug	SYK	20ug	UCK1	20ug		
SGK2	20ug	TAOK1	20ug	UCK2	20ug		
SGK3	20ug	TAOK2	20ug	UHMK1	20ug		
SGK494	20ug	TAOK3	20ug	ULK1	20ug		
SIK1	20ug	TBCK	20ug	ULK2	20ug		
SIK2	20ug	TBK1	20ug	ULK3	20ug		
SIK3	20ug	TEC	20ug	ULK4	20ug		
SLK	20ug	TEK	20ug	VRK1	20ug		
SMG1	20ug	TESK1	20ug	VRK2	20ug		
SNF1LK2	20ug	TESK2	20ug	VRK3	20ug		
SNRK	20ug	TEX14	20ug	WEE1	20ug		
SPHK1	20ug	TGFBR1	20ug	WEE2	20ug		
SPHK2	20ug	TGFBR2	20ug	WNK1	20ug		

产品列表

Product List

检测 BET BRD 相关药物

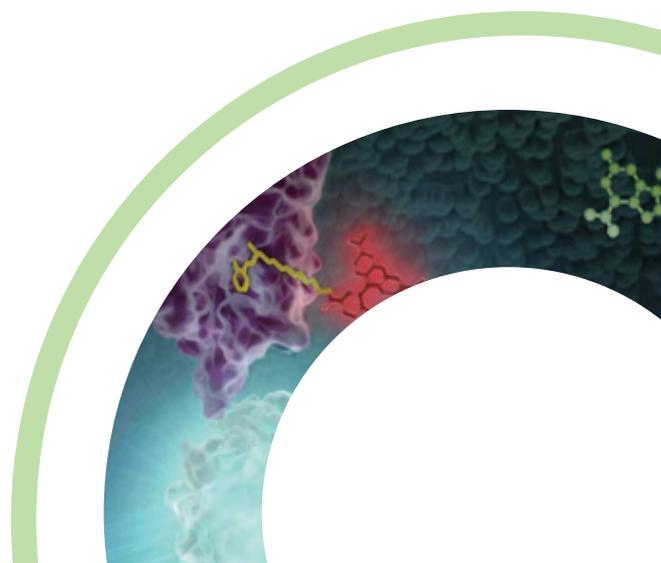
产品	规格	目录号
NanoBRET™ TE Intracellular BET BRD Assay	100 assays	N2130
	1000 assays	N2131
NanoBRET™ TE Intracellular BET BRD Detection Reagents	10000 assays	N2140
NanoBRET™ TE BET BRD DNA Bundle	1 each	N2150
NanoBRET™ TE Intracellular BET BRD Complete Kit	1000 assays	N2180

检测 HDAC 相关药物

产品	规格	目录号
NanoBRET™ TE Intracellular HDAC Assay	100 assays	N2080
	1000 assays	N2081
NanoBRET™ TE Intracellular HDAC Detection Reagents	10000 assays	N2090
NanoBRET™ TE BET HDAC DNA Bundle	1 each	N2120
NanoBRET™ TE Intracellular HDAC Complete Kit	1000 assays	N2170

NanoBRET TE Assay 相关组分

产品	规格	目录号
Intracellular TE Nano-Glo® Substrate/Inhibitor	1000 assays	N2160
	10000assays	N2161
Tracer Dilution Buffer	50ml	N2191
Transfection Carrier DNA	5 × 20µg	E4881



应用文献举例

Publications

- » Comess, K.M., McLoughlin, S.M., Oyer, J.A., Richardson, P.L., Stöckmann, H., Vasudevan, A., and Warder, S.E. Emerging Approaches for the Identification of Protein Targets of Small Molecules - A Practitioners' Perspective. *J. Med. Chem.* **61(19)**, 8504-8535.2018

应用产品: NanoBRET™ TE Intracellular HDAC Assay, NanoBRET™ TE Intracellular BET BRD Assay, NanoBRET™ TE Intracellular Kinase Assay, K-5, NanoBRET™ TE Intracellular Kinase Assay, K-4

- » Waring, M.J., Chen, H., Rabow, A.A., Walker, G., Bobby, R., Boiko, S., Bradbury, R.H., Callis, R., Clark, E., Dale, I., Daniels, D.L., Dulak, A., Flavell, L., Holdgate, G., Jowitt, T.A., Kikhney, A., McAlister, M., Méndez, J., Ogg, D., Patel, J., Petteruti, P., Robb, G.R., Robers, M.B., Saif, S., Stratton, N., Svergun, D.I., Wang, W., Whittaker, D., Wilson, D.M. and Yao, Y.

Potent and selective bivalent inhibitors of BET bromodomains. *Nat Chem. Biol.* **12(12)**, 1097–1104, 2016

应用产品: NanoBRET™ Nano-Glo® Detection System, NanoBRET™ TE Intracellular BET BRD Assay, NanoBRET™ TE Intracellular BET BRD Complete Kit, NanoBRET™ TE Intracellular BET BRD Detection Reagents, GloMax® Discover System

- » Robers, M. B., Binkowski, B. F., Cong, M., Zimprich, C., Corona, C., McDougall, M., Otto, G., Eggers, C. T., Hartnett, J., Machleidt, T., Fan, F. and Wood, K. V. A luminescent assay for real-time measurements of receptor endocytosis in living cells. *Anal. Biochem.* **489**, 1–8.2015

应用产品: NanoBRET™ TE Intracellular HDAC Assay, NanoBRET™ TE Intracellular BET BRD Assay

- » Stoddart, L.A., Johnstone, E.K.M., Wheal, A.J., Goulding, J., Robers, M.B., Machleidt, T., Wood, K.V., Hill, S.J., and Pflieger, K.D.G. Application of BRET to monitor ligand binding to GPCRs. *Nature Methods* **12(7)**, 661–663.2015

应用产品: NanoBRET™ TE Intracellular HDAC Assay, NanoBRET™ TE Intracellular BET BRD Assay

- » Robers, M.B., Dart, M.L., Woodroffe, C.C., Zimprich, C.A., Kirkland, T.A., Machleidt, T., Kupcho, K.R., Levin, S., Hartnett, J.R., Zimmerman, K., Niles, A.L., Ohana, R.F., Daniels, D.L., Slater, M., Wood, M.G., Cong, M., Cheng Y., and Wood, K.V. Target engagement and drug residence time can be observed in living cells with BRET. *Nat. Commun.* **6**, 10091 . 2015

应用文献举例

Publications

应用产品: NanoBRET™ Positive Control, NanoBRET™ Nano-Glo® Detection System, NanoBRET™ PPI MCS Starter System, NanoBRET™ PPI Flexi® Starter System, NanoBRET™ TE Intracellular HDAC Assay, NanoBRET™ TE Intracellular BET BRD Assay

- » Matthew B. Robers, Melanie L. Dart, Carolyn C. Woodroffe, et al., Target engagement and drug residence time can be observed in living cells with BRET, *Nature Communications*, 2015

应用产品: NanoBRET™ Assay

- » James D.Vasta, Cesear R.Corona, JenniferWilkinson, et al., Quantitative, Wide-Spectrum Kinase Profiling in Live Cells for Assessing the Effect of Cellular ATP on Target Engagement , *Cell Chemical Biology*, 2016

应用产品: NanoBRET™ Assay

Advancing Biomedical Research with Quality Chemical Probes

普洛麦格（北京）生物技术有限公司

地址：北京市东城区北三环东路 36 号环球贸易中心 B 座 907-909

电话：010-58256268 传真：010-58256160

网址：www.promega.com

技术支持电话：8008108133

技术支持邮箱：chinatechserv@promega.com

2019 年 1 月



欢迎关注 Promega 官方微信