

1. ÿ ...†‡- ...† ! ...†" Û#Ä \$% Ì &' () * ...†‡+&, - . ÛÜÝ, f, æÁA
f, æÁB/ ñ%ÒÓ% £-200ç; Æ1...† &2E40C% î " Ì
2. ~ " +ï ...†‡- 31...† 4ì ! 5...†" Û# \$ï 67% Ì
' (-
...†‡Í Û89: ; j ! <=ì >9â ?~ " @~ " +ï 31...†‡ ööAB? <=+1CDÍ ~ " EFÌ G
ÝH-Ì J / ‡ŽÄÏ Û#KÛj %L-Í ° âMN%OP²ï Ì

[Û®ï QRS% _]

° » ¼¹ - ÇTUVï ° » Wî ¼¹ ï X' Y ÇT
1ØZ' ³ ° » [j A« \PBSÔ0.01mol/Lj pH=7.0-7.2ØÉ· ê] ¶Áj ¼¹ ø^Ð_Ì
2Ø. ° » ` a´ [j ¼ï b 2AcÄï d efç ÄäåÁ(ghIS007j - i j k Ûl Öï m½¾² no
pÇTUVï äåÁ)ï qr L ÷ ÊÏŠ´ï ° » stuvøì ÒL³, wx=1:20-1:50j yu-1mLç Ää
åÁÊz b20-50mg° » €®Ì Ø
3Ø. { *ï | } Á~H• €• , f, . Ì
4Ø. Wî ýï ¼¹ Á10,000àg • 5â...j †‡^ j Ä. %ø9" £f, Å2E-200CŠ% Ì
½¾ç ÄÄ-Aâã...=< øj ½¾ì Ç" / ŠX' • , -
1Ø• Ž ½¾- • " \PBS• • • êj ' + " ' l Ö " " j £1,000àg • 5â...+) RÌ Ö | • ½¾9-
H • -~) RØÌ
2Ø.) R*ï ½¾" \PBSè3?@
3Ø. ½¾" efç ÄäåÁ_| f™7K107C½¾/š> j uœè t j ½¾9/ • ž • €ÿ• , fæÁ, . Ì
4Ø. Û®£2-80C 1,500àg • 10â...j †‡^ j Ä. %ø9" £f, Å2E-200CŠ% Ì
½¾ÄÄÄ. ÅÆÇ" • Û®- &1,000àg • 20â...j ZÄ. %ø9f, j Ä. Ä. 2E-200CÄ-800C% j
j Ç£¤¥Ì
' (-
1. / ÄÛ® ì™ % j 40C% ´ £1| j -200CÇ• H1CDj -800CÇ• H2CDÌ
2. Û®§¨ æ¶Y©ª « +f, -œj • v æ¶ Û®Ç- • ž v ®f, Ì
3. Û®~ " ø- ä~ ° f±6j Ç- z ú~ < ¥ÄÌ
4. ² £³³ f, Ñj j ´ µ¶. ~ " ¶. ç O¶¹¹ K€®• ž f, Ì

[Lumi nex200 â ã ô]

- 1. â ã, w- 50uL@
- 2. Š< UV- ^ á MagPl ex;
- 3. ° ^ á³ - 50» /¼;
- 4. MFI ½- Medi an.

[...† Ûî]

1. ~ " ø. ÿ ...†‡pÛ®ä~ ° f±6Ô18-250CØj uœ• ...†‡A©¾l JÍ Çç~ " j &œZ §®
?...= ìï Û8p...†j ù. 31ï Û8ñ...†! Ä²8Á% Ì
2. ÛÜÝ(œÄÝ)- Ä" ÛÜÝz bÛÜÝpBÁ0.5mLj Äý ± ± 6Ä²³ Æ10â...j Tl • • ÇÈÖ j É
ÊØj Æé 7K20.0ng/mL Ûî 7CpBÛÜÝï EP j ÄCEP Êz b300ËLï ÛÜÝpBÁj uÌ \$i
?Í x pBa 20.0ng/mL, 5.0ng/mL, 1.25ng/mL, 0.31ng/mL, 0.08ng/mL, 0.02ng/mL, 0.0ng/mLj ÛÜÝpB
Á(0ng/mL)-~¹ KÖÖÒÌ K%Î <= -œ %øj Ä? <=&~ " eï ÛÜÝæÄÌ

5. Ä^ i 2â...+† Á, j ÄÒ" 200ËLi eëÁeëj @Ê1-2â...j † ÒÍ Á, Ì_ÉéÓ3?
Ì «+@?êë+j ZÅAŞ31i eëäâÁj . ŪÓABA CÄj . D AÒÍ i Á, Ì i Á
Ì vHñs9í Ê^ eÓEFEaÌ
6.] ^ i ÄÖz f„ æÁBB¹ ÁÔ«" øÝWØ100ËLj ŪÓŪŪj 37OC ŪÓ ÷ 630â...j È
: ; ð2K800rpmj <2-4mmj =>^ á†OI
7. Ä^ i 2â...+† Á, j ÄÒ" 200ËLi eëÁeëj @Ê1-2â...j † ÒÍ Á, Ì eÓ3?j X
' T345Ì
8.] ^ i ÄÖz èÁ150ËLj 7 2â...j ~ Š< G| • " #j %9ÄEHÑÌ
' (-
1. ...† Ūî - Ūî ©?<= Ì t i Ū8j ÆÇi 9i ŠÒÓÄ: Šj ™ j ! 5™š> t >% j / i Š?
~ " j
2. z €- <= 2¹ Ê&~ " ©?%i JK j j ôõl z €i ' (Çt LÊG" j . €Ýz È ŪÓÖi
j , ³ ÇMñÒŽj • • NÈŪ¼l SÇ- ...† z b©€j z €HñÊ" ©CÒS« + ©CÒz €i J J O,
³ ´ Ó©PQWA10â.../Í Øj uæR³j . Y ÇT i S« 6ëTI J j l , šUV©ª * „ ³ ½i Ū
N%ñ_É%l KW„ ½i ŪN%j ¶. ð2EÒ• ž <=Ì
3. 6ë-K=>€Ý Xj <=l &. z ÄÄÄŪŪi ŪÓ2E5†Í j / j Á, Xj eÓ+- , - • ž
Š32¹ j YZI [M- j ŪÓ• ÉÄ\ " #j TI -] ^ _` a²i 6èl Jp67Ì
4. eë-Øâeëbc_tj AÄ?eëHñÊj Mt. eëÁEi ÐÄl uæ~ " í ÈéÓEj &Ade~ "
+í " Éfg<=HñÊÌ
5. uæ<=±Í 57 É60%j ¶. ~ " z 5÷ù 57 hÌ

[<=) , _]

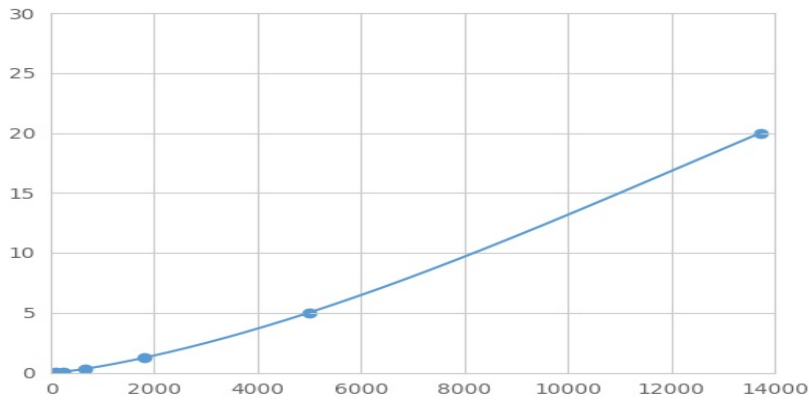
. TLR8±, xÉ^ %Š< i j j Wak Èl , j mŠ< Êâxz bŪŪÝÅŪ@j ÆÊTLR8Sn~ ÉkÈl ,
Äi ±, -o j ' +z b" • " i TLR8±, j A. -oi " • " ±, eó+j z bPEŪp i qp j PE×
r X+j Új MFI ½ÖMedian Fluorescence IntensityØi ³ ´ p€ÝÊi TLR8é7Gf ÈÉl " Lumi nexâ ã ô
„ ²j ŪŪ€Ýé7Ì

[ŪŪ]

s ŪŪÝñ€@MFI ½B] ÖÖÒMFI ½+¹ Ì Ôt ul Øj uð2EÒj v- ZÆh ½ŪŪl / ŪŪÝi é7
Kwx ŪŪÁýÑx ŪØj MFI ½Kyx ŪŪÁýÑx ŪØj z ŞŪŪ Ō« Xñg- i { | XñŪŪi R2½
F²j / R2½} ~• É1KyØl ¶. ~ " €• W¹ , Á• ž âãj ucurve expert 1.30j Új €ÝMFI ½j
ŪŪ fŞÈ- i é7j „ / ÞBÍ Ñ@Ä" ŪŪ• i é7SMFI ½ŪŪŞŪŪ i { | Xñgj . €Ýi
MFI ½...bXñgj ŪŪŞ€Ýé7j í „ / ÞBÍ Ñj %K€Ýi < Þé7Ì

[†VÑj]

KW±ÉŪŪj , é7Kí 1³ , MFI ½K• 1³ j ´ µz l l 4Q" ŪŪÝi MFI ½¹ Kyx ŪŪX^ Øj ŪŪ
Ýi é7Kwx ŪŪY^ Øl TI KW...= -œi -%oj Ì Èù• i O) ŠÑj , býÑ½l ¶. ~ " ýÑ½ö
< ŪŪ Ì Ì É<= 2¹ 8Ái ÇTŌu2¹ , ÁÆ• , eÓE• p678Á\$Øj ŪŪ i MFI ½Y
çŽl ù• i ŪŪ œ•• j <= Ì t Új í éi <= ð< ŪŪ Ì



(Total ϵ , 8) f , ... \pm \hat{U}

[f]

0.02-20ng/mL.

[$\ll f \cdot$]

$v \frac{1}{2} K 20 C \ddot{O} \ddot{O} \epsilon \dot{Y} \hat{O} \% \hat{U} \ddot{U} \dot{Y} \text{PBA} \emptyset$, $z \dot{i} h \frac{1}{2} z 9 \acute{I} \hat{U} \ddot{U} \grave{c} \acute{y} - \dot{i} \acute{e} 7 \grave{I}$

[$\check{Z} \%$]

$\textcircled{R} \dots \dot{\pm} \text{ " } \epsilon f$, TLR8; $\sim f$, SAEÇÈ' • L' š U " " Ç - \grave{I}

$\epsilon \cdot * \textcircled{E} \cdot \check{n} \in \textcircled{F} \cdot \dot{i} \cdot W_i \text{ Ç } 9 \grave{z} E a \quad \grave{E} \acute{E} \grave{A} \grave{E}' \cdot L " " \text{ Ç - } f$, $j \cdot v \textcircled{R} \dots \dot{\pm} 9 \grave{z} S \sim f$
 $\text{ " } \dot{i} \text{ AEÇ } \cdot L " " \text{ Ç - } \grave{I}$

[$\grave{a}^{\text{TM}} 7$]

$\grave{a}^{\text{TM}} 7$ " $\epsilon \dot{Y}$, $z \frac{1}{2} \dot{i} 1 \check{Z} - \check{N} C V_i \text{ \$ } \grave{I} C V \hat{O} \% \emptyset = SD / \text{mean} \grave{a} 100$

$- \acute{I} \grave{c} - Z T - ? \dots \dot{\pm} \acute{y} \text{ , } \acute{E} \text{ , } \frac{1}{2} z \frac{1}{2} \epsilon \textcircled{R} \cdot \check{z} z^3 f$, $j \check{A} \sim \epsilon \textcircled{R} n^{\text{TM}}$, $z 20$

$? ; \hat{a} \times \hat{U} \ddot{U} \text{ Ç } T \acute{e} 7 \epsilon \textcircled{R} \dot{i} h \frac{1}{2} \check{n} S D \frac{1}{2} \grave{I}$

$- J \grave{c} - o Z 3 C \text{ Ç } T - ? \dot{i} \dots \dot{\pm} \hat{a} \times \acute{y} \text{ , } \acute{E} \text{ , } \frac{1}{2} z \frac{1}{2} \epsilon \textcircled{R} \cdot \check{z} z^3 \text{ , } z ; \check{A} C \epsilon \textcircled{R} \sim " T \textcircled{C} \dots \dot{\pm} _ \epsilon$,
 $z 8 ? ; \hat{a} \times \hat{U} \ddot{U} \text{ Ç } T \acute{e} 7 \epsilon \textcircled{R} \dot{i} h \frac{1}{2} \check{n} S D \frac{1}{2} \grave{I}$

$- \acute{I} \grave{c} - CV < 10\%$

$- J \grave{c} - CV < 12\%$

[$P^2 \%$]

$\sim \text{ " } z ; \dots \dot{\pm} A \quad - \acute{I} \check{s} ! \text{ ¶ } \cdot 67\% ; > \% O ; \text{ . } \acute{I} \epsilon 5 \grave{I}$

$K \text{æ} \acute{z} \dot{i} \cdot \acute{y} \dots \dot{\pm} \cdot \check{z} \emptyset + f$, $\frac{1}{2} \dot{i} \textcircled{a} ; < = \pm \dot{i} \check{Y} 8 \acute{A} \grave{I} \text{ , } 3 \% ? \textcircled{C} ; ; \text{ AE } O < = \pm \acute{I} 67 \text{ , } 5$
 $7 \check{n} 6 \acute{e} 8 \acute{A} \grave{I} \text{ AE } ? T \textcircled{C} < = \text{ Ç } F \cdot \check{z} 2^1 9 \text{æ} \epsilon - K \text{æ} \text{ Ç } \grave{I}$

[$< = \alpha \check{n}$]

1, $< = \emptyset \hat{U} \ddot{U} \dot{Y}$, $\dots \dot{\pm} \check{n} \in \textcircled{R} \hat{U} \dot{i} @$

2, $z \in \hat{O} \hat{U} \ddot{U} \dot{Y} \acute{A} \epsilon \textcircled{R} \emptyset 100 \acute{E} L_i z \hat{^} \acute{a} ; 370 C \quad \hat{U} \acute{O} \quad \div \text{ ¥ } \grave{e} 1 \acute{I} @$

3, $\hat{^} \quad \text{ Ð } \acute{A} ; z f$, $\text{æ} \acute{A} 100 \acute{E} L_i 370 C \quad \hat{U} \acute{O} \quad \div \text{ ¥ } \grave{e} 1 \acute{I} @$

- 4, ^ ê Ó3? @
- 5, z f „ æÁB100ËLj 37OC È ¥ ë 30â ...@
- 6, ^ ê Ó3? @
- 7, z è Á150ËLj 7 2â ...+HÑÌ

[™Š]

- 1, £¨ 8Áñj | £• h\$ϕζý•g¨ ù•i) ©• žì j i º² Sâãj | ®GÝ9ζ A©
² i L³ £• « -ì
- 2, « - i <= -œS...t i %„ <= i ÈÉ2¹ / ñ<=Ý ™` ÈÉj &š Üî Ø i Û®î ~ Ì
- 3, ϕT-? i T ©GÝ9ζ Y £®ç x i u-f „ • „ ° 7j &i j ...t † Í ™š > • ž <= 2¹ j ±² ³
Žª ™š > œ¹ • Ì
- 4, ®...t † Ý´ ...t Ý´ ~ “ j ϕζ Û“ ÆµWâ¨ i GÝÌ à] ^ _ ` ®...t † i <= ™š ¶ Y { * «
i f „ -œÌ
- 5, A ñ6ëHñÊ jt • „ A¹ ° ÊÌ ...t “ Ä Ä» / => XpŠ” • ôõj • KI Ö Ä
i Ä . „ ½ϕÜNÌ
- 6, ¼ ½i ¾ÓÓÒË9ζ Y £® €• Lj vKf c¨ ζj ϕYý <= -œå aYZ ©ª Ì ÜÓÄ ~ “
Ì Ì dÄÁZ§j &èùøZ§Ì
- 7, £2¹ ϕde „ 2¹ ÁæÁúæo“ HÑòñÃ\$M 9ζ úæ-œi G” Ì <= ø&Ä½ÄH™š
> ÛÆ...ô ÷ Ì
- 8, A€®Wì / ñ2¹ i ÃCHñÊ i 1” M9ζ ϕT i <= -œj / KWù <= -œi 9_£%oj <
= i Ã©32¹ Mì t] ^ QWÌ
- 9, ...t † AŞÇø ~H] ^ Lfj È £` É8Áñs <= ±8Áç Žj 9ζ Yå a <= -œSŞÇ-œϕ©
ÁϕT-? ...t † -Jç Ê³ i %&Ì
- 10, ®...t † SÆµÇËTU...t † ÁϕTX’ f „ T©k i • i GÝüýxj / ϕÌ] f „ -œϕ© i
%&Ì
- 11, “ £Wì ...t † Ê±, i j Í) -cK_° i Öj È £î _° i Ö oZ i Î ¾„ i Î -Ð„ ò” Xg\$
s ϕTj / ´ µ´ ´ %Ì • ...t † 9” £Æµüü_° i Öj f „ j -c´ µs ϕðö” ...t † f „ _
° i ÖÌ
- 12, &« Ñ€ÝÊ „ • i é7j Á ðÛ« <= N² €Ýf „ é7Ì Ò€i • , 9 / => €®Ê f • Ê³ •
Ş...t † f „ Ì
- 13, • ...t † 9ζ ϕ’ “ £© <= ®p %ϕN² i Ó<= €Ýi f „ j yu j ² • Ô] <= \$Ì
- 14, ®2¹ ™šT€’ “ £48T...t † Ì
- 15, • ...t † œ• Ý´ ~ “ j u. Æ” £α¥j ŞÄYZÆµ” Öj ´ üü. ϕý•vG” i Öxý j ØϕÛ
ÜYZ’ Û YÌ

[ÖxÄÜ]

Öx	9ζ) •	ÄÝXp
ÛÜ ç	ÛÜÝÛî ϕfN	• ž f N i ÛÜÝß7pß
	ZñëèϕØâ	Øâi Zñëè
	ÁϕäN	f f p ý f Á ÷

ä™7	^ á ê ë ç ø â	! ™ š > t > ø â 7 é ë þ @ Ě
	Û¼çøâþ Z...tç	øâÛ¼þ Z...t
	_£œ" , î ÷ þ Û Û	~ " z € ÷ t à á e i , ~ "
	z € ç ä Ñ	f f þ ý f Á ÷
MF I ½	Ã Ò z ï ... t ³ ç ä Ñ	ÿ f Á ÷ j ä Ñ z b ... t
	ö ë l j ç f Ñ	% î ø ï ö ë l j
	ö ë ö 7 ç f Ñ	... t t h ° f ± ö ü % î Û Ñ ï ö
	PEÛþ•Â	à á ... t
	PEÛþ• Þ ß Í Ñ ç ý	! 5 ™ š > < = 2¹
	• § H Ñ l j H Ñ	A ™ š > ¶ · ï H Ñ l j Í H Ñ
€®½	ç f Ñ ï €® Xg	f Ñ €® j ~ " e f €® • ž
	ç f Ñ ï €®) Rþ• , X'	QZ f Ñ ï €®) Rþ• , X'
	„ • LA €® Ě Ě ³	~ " e f €® j _ £ < =