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یکتا تجهیز آزما

Specification and parameters
Custom Oligo

Oligo(dT) 18 primer Cat:YT4551 **For Research Use Only**
Random Hexamer primer Cat:YT4550

Note:These primers are Lyophilized.
The volume of DEPC water used for Concentration 100 µM:
Oligo (dT)18 primer : 30.48 µl
Random Hexamer : 92.09 µl

Concentration 50 µM:
Oligo (dT)18 primer : 60.96 µl
Random Hexamer : 184.48 µl

1) **Storage and reconstitution**

We usually supply unmodified oligonucleotides in lyophilized state, since this form is less sensitive to degradation by nuclease and more stable for transportation. We recommend you to store this lyophilized state at the temperature of -20°C or below. Once you have dissolved your oligonucleotides in the sterile water or buffered solutions (or you have already received your oligonucleotides in the requested solution), the best way to keep item is to aliquot them in to several tubes, lyophilize the aliquots, and store them at -20°C . The sample you are using can be kept in a refrigerator at 4°C for a short time to avoid continuous freezing and thawing of the solution.

2) **Concentration calculate**

If interested in the number of µ-grams per ml, take a OD value times 33 (the extinction coefficient *) and divide by the volume in ml. The equation is:

µg/mL=ODx33/V(mL)

for example, if there are 28 OD's in 500µL of water, the calculation would be:

28x33/0.5=1848µg/mL

To figure out the micro molar concentration , divide by the number of µgrams by the M.W of the oligo and the volume of the sample in liters. So the equation is :

µM=ODx33/M.W./V(L)

M.W.=(#Ax312.2)+(#Cx288.2)+(#Gx328.2)+(#Tx303.2)-61

For example, if a sample has 28 OD's in 500µL, the the molecular weight is 9000 dalton , the calculation would be:

28x33/9000/0.0005=205µmol/L=205pmol/ul

The OD value has no units and represents the total mass presented in the sample.It is independent of the volume of the solution.To calculate the number of µ-grams in the oligo sample , take the OD value times a constant called the molecular extinction coefficient. The molecular extinction coefficient varies slightly for each oligo, but 33 is used generally as a good approximation for single standard DNA.

3) How to resuspend the Oligos?

Before opening, spin the tube for a short time to ensure that the oligos are at the bottom of the tube. We recommend dissolving the stock oligo in concentrated form in TE (10mM Tris pH 8.0,1 mM EDTA). Alternatively ,Sterile dH2O can be used.

We find it convenient to initially make a freezer stock (which should be thawed relatively infrequently) at 100uM concentration.Adding a volume (uL) equal to 10 timesthe number of nanomoles (nmol) of DNA present in the DNA synthesis report will produce a stock solution at this concentration (100uM).

Name	Sequence(5'-3')	Length	MW	Tm	GC%	OD	Tube	nmol	water/Tube	Purification
THEOLIGO(DT)18PRIMER	TTTTTTTTTTTTTTTTTT	18	5413.64	34.52	0.00%	0.5	100	3.05	**30.48**	QPC
RANDOMHEXAMERPRIMER	NNNNNN	6	1791.74	- - -	0.00%-100.00%	0.5	100	9.21	**92.09**	QPC

*=Phosphorothiioate Bonds

m=Methyl

Water=The volume (ul) for 100uM