ICS

DB

Quality requirements for synthetic gene

GB/T 1.1-2009

DNA

GB/T 6682
GB/T 19495.1
GB/T 19495.2
GB/T 19495.3
YY/T 0087
YY/T 0657
JB/T 6777

GB/T 19495.1

DNA

260 nm 280 nm

OD_{260}/OD_{280} DNA

260 nm 230 nm

OD_{230} ( ) DNA OD_{260}/OD_{230} 2

DNA

JJF 1265-2010

DNA

SN/T 2497.21-2010

DNA

DNA DNA

DNA

DNA

DNA

EB Ethidium Bromide ——

OD Optical Density ——

DNA Deoxyribonucleic acid ——

1

DNA DNA		4.2 4.3 4.4
		4.2 4.4

		4.2 4.4
		4.4
		4.4

TE pH7 8.5 OD_{260}/OD_{280} 1.8 2.0 OD_{260}/OD_{230} 2.0 2 DNA

	OD_{260}/OD_{280}=1.8 2.0 OD_{260}/OD_{230} 2.0
	OD_{260}/OD_{280}<1.8 >2.0 OD_{260}/OD_{230}<2.0

DNA

DNA 5.2 DNA

—— DNA

—— DNA A

DNA Marker DNA

A

DNA 100%

DNA GB/T 19495.3 OD_{260}

0.05 1.0 DNA

DNA OD_{260} OD_{280} OD_{230} DNA DNA

OD_{260}/OD_{280} OD_{260}/OD_{230}

DNA 1 DNA 2 DNA

$$c = OD_{260} \times N \times F \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

c — DNA g/ml

N —

F — , 1cm DNA OD_{260}=1 DNA 50 g/ml

$$m = c \times v \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (2)$$

m — DNA g

c — DNA g/ml

v — ml

DNA B

DNA

DNA DNA

DNA DNA -20 15-25% -80

GB/T 19495.2 YY/T 0657

JB/T 6777 YY/T 0087

DNA

0.22 m DNA

GB/T 6682

C

——

—— DNA

—— DNA

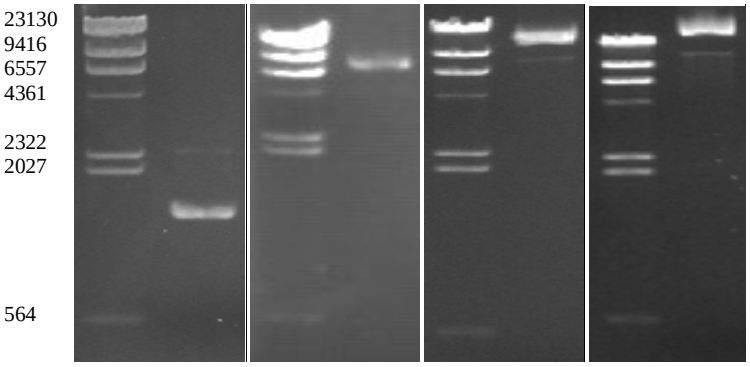
DNA 100%

DNA 100%

DNA 100%

GB/T 19495.2

DNA 1% A.1:



DNA

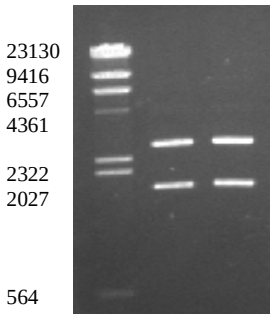
DNA DNA DNA

DNA DNA

DNA

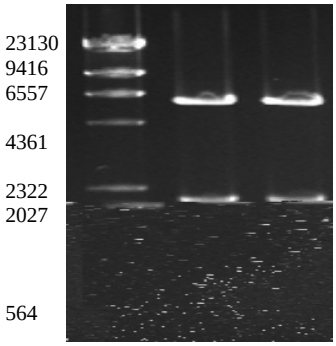
DNA DNA

DNA 1% A.2:



DNA 1.7kb, 2.7kb

DNA 1% A.3:



DNA 6.1kb, 2.1kb

DNA B.1

/ %	DNA / kb kb %%/

DNA

	_____%	100%
DNA	_____	DNA
DNA	OD_{260}/OD_{280}=_____ OD_{260}/OD_{230}=___ =_____	OD_{260}/OD_{280}=1.8 2.0 $OD_{260}/OD_{230} \geq 2.0$

DNA

DNA