

DNA analysis - Electrophoresis

MW markers



φX174/HinfI (726 - 24 bp) UPS54781 - 50 µg
Complete *HinfI* digestion of φX174, phenol extracted, ethanol precipitated and dissolved in Tris-HCl (pH7.6) and 1 mM EDTA.
Fragments (bp) : 726, 713, 653, 500, 427, 417, 413, 311, 249, 200, 151, 140, 118, 100, 82, 66, 48, 42, 40, 24.

λ/HindIII (23130 - 125 bp) UPS54821 - 50 µg
Complete *HindIII* digestion of DNA (C1857 Sam7), phenol extracted, ethanol precipitated, dissolved in 10 mM Tris-HCl (pH7.6) and 1 mM EDTA.
Fragments (bp) : 23130*, 9416, 6557, 4361*, 2322, 2027, 564, 125.

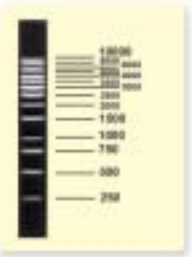
*Fragments marked with asterisk may anneal and form an additional band. Separate by incubation at 65°C for 5 min plus cooling on ice for 3 min.



pBR322/BsuRI (587 - 8 bp) UPS54791 - 50 µg
Complete *BsuRI* digestion of pBR322, phenol extracted, ethanol precipitated, dissolved in 10 mM Tris-HCl (pH 7.6) and 1 mM EDTA.
Fragments (bp) : 587, 540, 504, 504, 458, 434, 267, 234, 213, 192, 184, 124, 123, 104, 89, 80, 64, 57, 51, 21, 18, 11, 8.



1 Kbp Ladder (10000 - 500 bp) UPS54801 - 50 µg
Complete digestion of various plasmids, phenol extracted, ethanol precipitated, dissolved in Tris-HCl (pH7.6) and 1 mM EDTA.
Fragments (bp) : 10000, 8000, 6000, 5000, 4000, 3500, 3000, 2500, 2000, 1500, 1000, 750, 500, 250.



100 bp Ladder (1000 - 80 bp) UPS54811 - 50 µg
Complete *Eco* 1471 and *Pvu* I digestion of pMLX, phenol extracted, ethanol precipitated, dissolved in Tris-HCl (pH7.6) and 1 mM EDTA.
Fragments (bp) : 1000, 900, 800, 700, 600, 500, 400, 300, 200, 100, 80.

* Fragments marked with an asterisk may anneal and form an additional band.

DNA MW markers

Molecular weight markers are valuable tools for estimating the size of nucleic acid fragments by agarose or acrylamide electrophoresis. Our selection of DNA markers ranges in fragment size from 11 base pairs to > 48kb for a variety of electrophoresis applications. For analysis of PCR products, Interchim offers three ideal DNA markers (DNA MicroMarker™, PCR DNA Marker™, and PCR DNA Marker PLUS™). For general applications between 0.1 kb and 21 kb, there are three markers prepared from I DNA digests (Low-Range™ Marker I, II, and III). For applications where maximum assortment of fragment size is essential (gene mapping and RFLP analysis), our Wide-Range Marker is superior. To evaluate fragments >10 kb, our High-Range Marker is most convenient.

General DNA marker for all applications

Unknown DNA samples are typically run on the same gel with a sample of DNA which bands sizes are known, a "ladder". After the sample is ran, the unknown fragments can be compared with the ladder fragments to determine the approximate size of the unknown DNA bands by how they match up to the known bands of the ladder.

Description	Cat.#	Qty
1 Kbp Ladder (10000 - 500 bp) Complete digestion of various plasmids, phenol extracted, ethanol precipitated, dissolved in Tris-HCl (pH7.6) and 1 mM EDTA. Fragments (bp): 10000, 8000, 6000, 5000, 4000, 3500, 3000, 2500, 2000, 1500, 1000, 750, 500, 250.	UPS54801	50 µg
100 bp Ladder (1000 - 80 bp) Complete <i>Eco</i> 1471 and <i>Pvu</i> I digestion of pMLX, phenol extracted, ethanol precipitated, dissolved in Tris-HCl (pH 7.6) and 1 mM EDTA. Fragments (bp) : 1000, 900, 800, 700, 600, 500, 400, 300, 200,100,80.	UPS54811	50 µg
φX174/HinfI (726 - 24 bp) Complete <i>Hinf</i> I digestion of φX174, phenol extracted, ethanol precipitated and dissolved in Tris-HCl (pH7.6) and 1mM EDTA. Fragments (bp): 726, 713, 653, 500, 427, 417, 413, 311, 249, 200, 151, 140, 118,100,82,66,48,42,40, 24.	UPS54781	50 µg
pBR322/BsuRI (587 - 8 bp) Complete <i>BsuRI</i> digestion of pBR322, phenol extracted, ethanol precipitated, dissolved in 10 mM Tris-HCl (pH 7.6) and 1mM EDTA. Fragments (bp): 587, 540, 504, 458, 434, 267, 234, 213, 192, 184, 124, 123, 104, 89, 80, 64, 57, 51,21,18,11,8.	UPS54791	50 µg
λ/HindIII (23130 - 125 bp) Complete <i>Hind</i> III digestion of DNA (C1857 Sam7), phenol extracted, ethanol precipitated, dissolved in 10 mM Tris-HCl (pH7.6) and 1mM EDTA.Fragments (bp): 23 130*, 9 416, 6 557, 4 361*, 2322, 2027, 564, 125.	UPS54821	50 µg

MW markers for PCR analysis :

DNA MicroMarker™ is a Hae III digest of pUC 18 plasmid DNA that offers 11 fragments from 11 to 587 base pairs in length. Perfect for resolving the thinnest fragments.

PCR DNA Marker™ is a true DNA "Ladder" providing 8 evenly spaced bands ranging from 50 to 2 000 base pairs. Ideally suited for evaluating PCR fragments quickly and reliably.

PCR DNA Marker PLUS™ is a mixture of PCR DNA Marker™ and DNA MicroMarker™ containing 19 fragments ranging in size from 11 to 2 000 bp. An excellent choice for accurate determination of DNA fragment size.

Low-Range I™ Marker is a Bst E II digest of I DNA that yields 14 fragments ranging in size from 117 to 14 140 base pairs. This marker is available premixed with loading dye (Marks-It™) for maximum convenience.

Low-Range II™ Marker is a I Eco RI digest that yields 6 fragments ranging in size from 3.5 to 21 kb in length.

Low-Range III™ Marker is a I Hind III digest that features 8 fragments ranging in size from 0.1 to 23 kb in length.

High-Range Marker is suited for evaluating large fragments >10 kb in length. This combination of several single-cut with fragments ranging in size from 1.5 to 48.5 kb.

Wide-Range Marker is a combination of Low-Range Marker I and High-Range Marker having 24 fragments ranging from 0.1 to 48.5 kb in length. An excellent assortment of fragment sizes for many applications.

Description	Cat.#	Qty
DNA MicroMarker (11 bands from 11 bp – 587 bp)	446380	100 µg
PCR DNA Marker (8 bands from 50 bp – 2,000 bp)	523920	50 rxn
PCR DNA Marker PLUS (19 bands from 11 bp – 2,000 bp)	N13990	250 µl
Low-Range I Marker (14 bands from 117 bp – 14 Kb)	467490	100 µg
Marks-It (14 bands from 117 bp – 14 Kb)	467540	100 µg
Low-Range II Marker (6 bands from 3.5 Kb – 21 Kb)	731590	100 µg
Low-Range III Marker (8 bands from 0.1 Kb – 23 Kb)	303460	100 µg
High-Range Marker (10 bands from 10 Kb – 48.5 Kb)	467500	150 µg
Wide-Range Marker (24 bands from 0.1 Kb – 48.5 Kb)	467510	200 µg

LOAD 'n GLO™ Labeled DNA Markers

- ◆ Easy to Use.
- ◆ 2 Different DNA Markers Available with Biotin, DNP, Digoxin, or Fluorescein Labels.
- ◆ Great Value.
- ◆ Ideal for Non-radioactive Southern Blots.
- ◆ Sensitive Detection.

The **LOAD 'n GLO™ Labeled DNA Markers** were developed for use primarily in non-radioactive Southern blot applications and are formulated to allow visualization after resolution in an ethidium bromide stained agarose gel or by enzymatic detection of the specific epitope (biotin, digoxin, DNP, or fluorescein) after blotting to a membrane. The **LOAD 'n GLO™ Labeled DNA Markers** are supplied at 0.25 µg/µl.

The labeled 1 kb DNA ladders contain the following 14 discrete fragments (in bp) : 10 000 ; 8 000 ; 6 000 ; 5 000 ; 4 000 ; 3 500 ; 3 000 ; 2 000 ; 1 500 ; 1 000 ; 750 ; 500 and 250.

The labeled lambda DNA/*Eco*RI + *Hind*III Marker yields 11 discrete fragments (in bp) : 21 226 ; 5 148/4 973 ; 4 268 ; 3 530 ; 2 027 ; 1 904 ; 1 584 ; 1 375 ; 947 ; 831 and 564.

Description	Cat.#	Qty
1 kb DNA Ladder, Biotin	J40230	25 µg (-50 lanes)
1 kb DNA Ladder, Digoxin	J40960	25 µg (-50 lanes)
1 kb DNA Ladder, DNP	J41010	25 µg (-50 lanes)
1 kb DNA Ladder, Fluorescein	J41020	25 µg (-50 lanes)
Lambda DNA/ <i>Eco</i> RI + <i>Hind</i> III Marker, Biotin	J41080	25 µg (-50 lanes)
Lambda DNA/ <i>Eco</i> RI + <i>Hind</i> III Marker, Digoxin	J41410	25 µg (-50 lanes)
Lambda DNA/ <i>Eco</i> RI + <i>Hind</i> III Marker, DNP	J41620	25 µg (-50 lanes)
Lambda DNA/ <i>Eco</i> RI + <i>Hind</i> III Marker, Fluorescein	J41630	25 µg (-50 lanes)

Each vial contains sufficient material for 50 marker lanes using 2 µl/lane.

