

Protocol for use of Advanced Biomedical Peptide based gene delivery vector.

Sequence: Myr-LEAALAEALEALAAGKPALASWIRRRRQQ-amide

Cat No: ABL-202

Lyophilised powder store in a cool and dry place

1) Charge Ratio Determination

The peptide vector has a molecular weight of 3411 with a net charge of +2. As one microgram of DNA is usually taken to contain 1.942×10^{15} negative charges. To attain a 1:1 charge ratio, therefore it is recommended that 5.5µg of ABL peptide vector should be added per 1µg of DNA used.

2) Complex Formation

- i) Dilute DNA using 10mM Hepes, pH 7.4 to a concentration of 1µg per 25µl.
- ii) Weigh the relevant amount of ABL peptide vector for the desired charge ratio (see 3 below) and dilute to an equal volume with 10mM Hepes, pH 7.4.
- iii) Add peptide solution to DNA and mix thoroughly by aspiration.
- iv) Incubate at room temperature for 30 minutes.

3) Cell Transfection

Transfection can be tested by standard methods using the following optimised charge ratios (peptide:DNA).

Cell Line	Optimum Ratio
A549	2:1
HT1080	3:1
KHT	2:1
HT29	2:1
HCT116	2:1
Caco-2	2:1

Protocol Rev: 03/02/04

This product is distributed for laboratory research use only. CAUTION: Not for diagnostic use. The safety and efficacy of this reagent for any other use has not been established.