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# Assembly of genetic constructs for analysis of three promoters in plants

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To study the processes of plant development, it is often necessary to find out in which tissues and cells the gene is expressed. To do this, genetic constructs with promoters and fluorescence reporters are used.

The aim of our work is to create a construct for the simultaneous analysis of the activity of three promoters: auxin-responsive DR5 promoter, cytokinin sensor TCS, and any other promoter necessary for research purposes. We have selected fluorescent proteins with different spectral characteristics that make it easy to distinguish them from each other: red (mCherry), blue (TagBFP), green (mNeonGreen). Hygromycin B resistance gene we use to select transgenic plants. For cloning, we used the MoClo vector system. So far, we have created 5 plasmids containing hygromycin resistance gene, *mCherry*, *mTagBFP*, and *DR5* and *TCS* promoters. The next step is to create a single vector that will contain all components.

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