Radioactively Labeled Oligonucleotides

For some purposes radioactive labeling is still unbeaten by any other current detection form. For example they play a very important role in the development of these biopolymers as drugs because carrying a radioactive tag they can be readily tracked *in vitro* and in *vivo*. The FDA requires these studies for an IND (investigative new drug) filing, which is an early step in the process of drug approval.
We offer 2 kinds of radioactive labels:

^{32}P

- you get your labeled and purified oligo *ready to use*.
- at your request we strictly keep the activity exemption limit at 0.5 MBq (13.5 µCi). Below this limit you can legally work with radioactive material without official permission. For autoradiographic detection, however, the allowed 0.5 MBq are more than enough;
- if you are working with "hot oligos" only from time to time this service can be especially helpful for you:
    1. You save time and avoid potential sources of error;
    2. You save money, because you only have to order the amount of radioactivity you actually need for your experiment;
    3. You do not have to care about radiation protection and radioactive waste;
- 5´ labeling
- about 20 pmol (0.5-1 MBq, on request strictly limited to 0.5 MBq!)
- specific activity: 1000-2000 Ci/mmol
- buffer conditions: 10 mM Tris-HCl, 1 mM EDTA

^{33}P

in addition to the above listed features there are some more advantages of this kind of label:

- a half-life of 25 days (compared to 14 days for ^{32}P) enables you to work with this substance for many weeks;
- because of the lower b -energy, ^{33}P provides a by far better band accuracy as well as less trouble with the handling of labeled material (radiation protection!);