

# RNA from cells, tissue and blood

The InviTrap® Spin Universal RNA Mini Kit simplifies total RNA isolation from different starting materials such as cells, tissue and blood. The genomic DNA is removed without an enzymatic digestion step. RNases are inactivated to prevent RNA degradation. The isolated RNA is ready to use for a broad panel of downstream applications like RT-PCR, northern blotting and array technologies.

## Product characteristics

- **Starting material:** up to  $10^7$  cells; 20 mg tissue (also FFPE tissue); 1.5 ml whole blood (EDTA/ Citrate)
- **Average yield:** up to 100 µg
- **Preparation time:** approx. 10 - 45 min

## Benefits

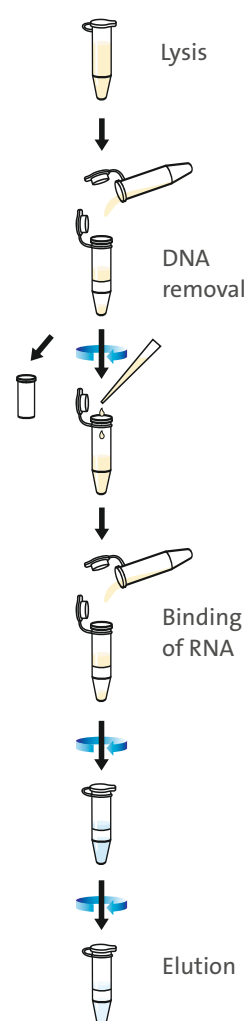
- Pure RNA without DNase digestion - selective genomic DNA removal during lysis step
- Optimized protocols for cells, tissue and blood - incl. additional protocols for RNA Cleanup from TRIzol® phases and enzymatic reactions, protein/RNA extraction, RNA/DNA isolation
- For In Vitro Diagnostic Use (CE-IVD)\*

\*) Compliance with EU Directive 98/79/EC on in vitro medical devices (Not for in vitro diagnostic use in countries where the EU Directive 98/79/EC on in vitro medical devices is not recognized.)

## Ordering information

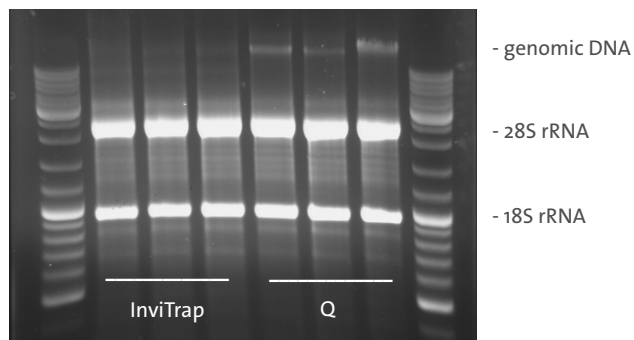
PRODUCT	PACKAGE SIZE	CATALOGUE NUMBER
InviTrap® Spin Universal RNA Mini Kit	50 purifications 250 purifications	1060100200 1060100300

## Workflow



# APPLICATION EXAMPLE

## Effective DNA removal



Total RNA was isolated from  $1 \times 10^6$  NIH 3T3 cells using the InviTrap® Spin Universal RNA Mini Kit and a competitor kit Q. Standard protocols for both kits were used. The RNA was eluted in 50  $\mu$ l and 5  $\mu$ l of the eluted RNA were analyzed on a 1.2% denaturing agarose gel stained with ethidium bromide.

InviTrap®: pure RNA without DNase digestion

Q: despite DNase digestion - DNA contamination using the competitor kit

## Selected references

### Activation of Protein C in Human Trophoblasts in Culture and Downregulation of Trophoblast Endothelial Protein C Receptor by TNF- $\alpha$ .

Faioni EM, Fontana G, Razzari C, Avagliano L, Bulfamante G, Calvi E, Doi P, Marconi AM. Reprod Sci. 2015 Aug;22(8):1042-8.

### Generation and characterization of small single domain antibodies inhibiting human tumor necrosis factor receptor 1.

Steeland S, Puimège L, Vandenbroucke RE, Van Hauwermeiren F, Haustraete J, Devoogdt N, Hulpiau P, Leroux-Roels G, Laukens D, Meuleman P, De Vos M, Libert C. J Biol Chem. 2015 Feb 13;290(7):4022-37

### Toll-like receptor 2 mediates microglia/brain macrophage MT1-MMP expression and glioma expansion.

Vinnakota K, Hu F, Ku MC, Georgieva PB, Szulzewsky F, Pohlmann A, Waiczies S, Waiczies H, Niendorf T, Lehnardt S, Hanisch UK, Synowitz M, Markovic D, Wolf SA, Glass R, Kettenmann H. Neuro Oncol. 2013 Nov;15(11):1457-68.

## Related products

PRODUCT	PACKAGE SIZE	CATALOGUE NUMBER
InviTrap® Spin Cell RNA Mini Kit	50 purifications	1061100200
	250 purifications	1061100300
InviTrap® Spin Tissue RNA Mini Kit	50 purifications	1062100200
	250 purifications	1062100300
InviMag® Universal RNA Mini Kit/ KF96	1 x 96 purifications	7460300100
	5 x 96 purifications	7460300200