

# Transgenomic™ ICsep Columns **Tk**

## ICsep Columns for Organic Acid Analysis

The technique of ion exclusion is preferred for the separation of weakly ionizable types such as the organic acids and the alcohols. Transgenomic has developed a full range of columns that for efficiency and specificity are unique when dealing with this class of separations.

- Polymeric substrate.
- High Efficiency.
- High resolution.
- Separate organic acids, carbohydrates and alcohols on a single column.
- Extremely resistant and with a long useful lifetime.

Column	Dimensions	Cat.No.
COREGEL 87H1	7,8 X 100 mm	TG-ICE-99-5861
COREGEL 87H3	7,8 X 300 mm	TG-ICE-99-9861
COREGEL 107H	7,8 X 300 mm	TG-ICE-99-9866
COREGEL 64H	7,8 X 300 mm	TG-ICE-99-9860
ION-310	6,5 X 150 mm	TG-ICE-99-7752
ION-300	7,8 X 300 mm	TG-ICE-99-9850
ORH 801	6,5 X 300 mm	TG-ICE-99-9754
WINE ANALYSIS WA-1	7,8 X 300 mm	TG-ICE-99-9810
ARH 601	6,5 X 100 mm	TG-ICE-99-5753

*Precolumns for every type of column available on application.*

Compound	Coregel 87 H @ 85 °C (units in minutes)	Coregel 64 H @ 65 °C (units in minutes)	ION-300 @ 65 °C (units in minutes)	ORH-801 @ 45 °C (units in minutes)
Acetic acid	13.8	15.0	14.9	10.4
Acetoacetic acid	n/d	n/d	n/d	10.2
Aconitic acid	8.6	9.8	10.7	7.2
Acrylic acid	15.9	17.7	17.9	13.1
Adiptic acid	12.5	15.1	15.8	11.6
Butanol	32.9	35.1	25.2	18.4
Butyric acid	18.4	21.0	20.8	15.2
Citraconic acid	10.1	11.0	11.5	n/d
Citric acid	7.5	8.0	8.6	5.5
Ethanol	21.4	21.7	20.6	14.6
Formic acid	12.9	13.8	13.9	9.6
Fumaric acid	11.5	13.4	14.7	10.0
2-Furoic acid	22.1	26.9	29.0	22.0
Glucuronic acid	n/d	n/d	n/d	5.3
Glycolic acid	11.4	13.0	12.9	8.5
Glucosyllic acid	9.2	9.7	10.3	6.5
Hydroxybutyric acid	12.8	14.0	14.1	9.5
Iso-butyric acid	17.3	19.6	19.5	14.0
Itaconic acid	11.1	12.8	13.4	9.1
Keto-butyric acid	n/d	n/d	11.4	7.4
Keto-gutaric acid	7.8	8.2	n/d	5.6
Keto-valeric acid	11.7	12.6	13.1	8.6
Lactic acid	11.9	12.9	11.6	8.7
Maleic acid	8.2	8.6	9.0	5.9
Malic acid	8.8	9.6	10.3	6.6
Malonic acid	9.3	10.0	10.7	6.9
Methanol	18.7	19.0	18.7	12.9
Methylglutaic acid	11.8	13.9	14.5	10.0
Methylsuccinic acid	10.9	12.5	13.0	8.8
Oxalic acid	6.7	6.6	n/d	4.5
Propanol	25.9	26.7	22.2	16.1
Propionic acid	15.8	17.4	17.4	12.3
Pyruvic acid	9.2	9.5	9.9	6.3
Quinic acid	9.4	10.3	11.4	6.9
Shikimic acid	10.5	11.8	12.9	8.2
Succinic acid	10.4	11.7	12.2	8.2
Tartaric acid	8.0	8.6	9.5	5.9

Flow rate: 0.6 mL/minute. n/d = not determined