

## FcRn Affinity Column

### *Enhanced analysis of antibody half-life*

#### Function and effects of the FcRn

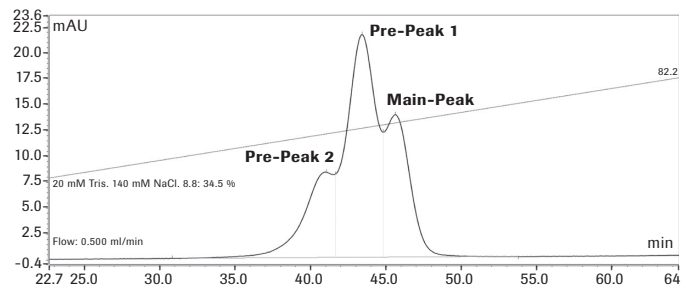
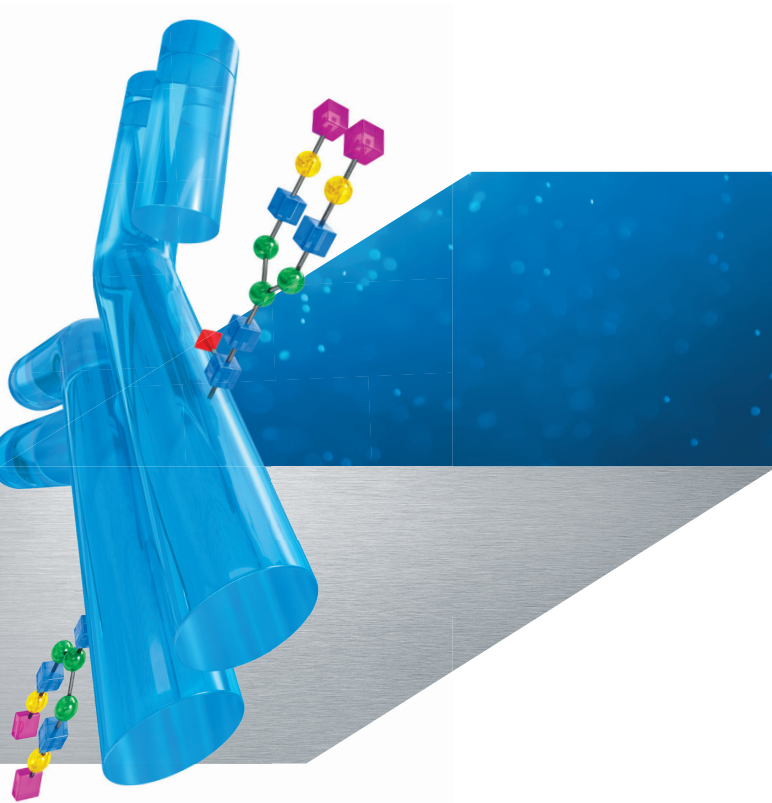
The neonatal Fc receptor (FcRn) is important for the metabolic fate of IgG antibodies *in vivo*. Analysis of the interaction between FcRn and IgG *in vitro* can provide insights into the structural and functional integrity of a therapeutic IgG, which can impact pharmacokinetics (PK) *in vivo*.<sup>1</sup>

An affinity chromatography column that resolves antibody species and variants based on binding affinity to FcRn is now available from Roche CustomBiotech. The column uses a pH gradient allowing you to easily view binding across a range of pH values, not only at pH 6.0 or pH 7.4.

The FcRn Affinity Column accelerates and standardizes antibody half-life analysis, so you can develop a meaningful lead candidate more quickly.

#### The easy-to-use FcRn Affinity Column works on your HPLC and allows you to:

- characterize and distinguish
  - IgG variants with different Fab fragments.
  - oxidized and native IgG.
  - aggregated and monomeric IgG.
  - wild-type and engineered IgG.
  - antibody isotypes.
  - aggregates and unbound serum albumin.
- monitor antibody behavior at multiple pH values, visualizing even minor differences in antibody and its half-life.
- automate antibody processing.
- eliminate potentially inconsistent coating densities for truly standardized analyses.



Evaluation of a partially oxidized monoclonal antibody (Stracke J, et al., 2014)

### Proteins that bind to FcRn

- Human IgG1, IgG2, IgG3, IgG4
- Human albumin (often used as a fusion protein for therapeutic proteins)
- Some IgG antibodies of non-human species are able to bind human FcRn

### Specifications

#### Prepacked chromatography column

with 1 mL FcRn resin

<b>Binding capacity</b>	≥ 100 µg IgG
<b>Maximal system pressure</b>	20 bar
<b>Maximal volumetric flow rate</b>	0.5 mL/minute
<b>Stability</b>	stable for ≥ 100 injections, stored at +2 to +8°C

### Literature on CustomBiotech website

Please see the comprehensive list of publications here:



### Ordering information

Product	Pack size	Catalog number
FcRn Affinity Column	1 pre-packed, 1 mL bed volume, HPLC column	08 128 057 001

### Regulatory disclaimer

For quality control/manufacturing of IVD/medical devices/pharmaceutical products only.

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