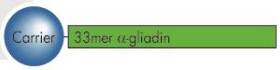
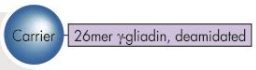
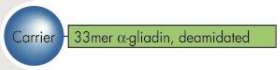
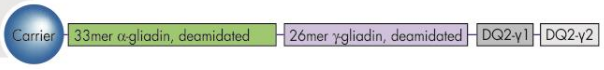
Product Data Sheet

Product number **G054**
Revision number RN2.3

Product Name 33mer DGP

Background info Gliadin peptides derived from *Triticum aestivum* (wheat) are the main immunotoxic antigens present in celiac disease. They are substrates for tissue transglutaminase, which specifically deamidates glutamine residues within these peptides, and therefore strongly increases their immunogenicity (Dørum S. et al., J. Proteome Res. 2009; 8:1748-55).

We offer a set of fusion proteins that carry the different native and deamidated peptide sequences that facilitate the analysis of antibodies found in celiac disease related samples.

Art. No.	Name	
G051	26mer gliadin peptide	
G052	33mer gliadin peptide	
G055	Carrier protein control	
G007 / G060	DGPx1 (26mer DGP)	
G054	33mer DGP	
G006	DGPx2	
G005	DGPx4	

Description 33mer DGP is a fusion protein consisting of the peptide sequence "LQLQPFPQPELPYPQPELPYPQPELPYPQPQPF" and a carrier protein that can be used as an antigen for the detection of antibodies specific for deamidated alpha gliadin.

Source Recombinantly produced in *E. coli*

Quantity 100 µg / 250 µg

Molecular Weight 27 kDa

Appearance White lyophilized solid.

Reagents 33mer DGP is lyophilized from a solution of ~50 mM NaH_2PO_4, pH 6.8.

Reconstitution Add the volume of H_2O the protein is lyophilized from (see Certificate of Analysis) to the vial of lyophilized powder. Rotate vial gently until solid dissolves. Further dilutions can be prepared in your buffer of choice. After reconstitution, the solution should be stored frozen in working aliquots.

Application The recombinant antigen is meant for solid (ELISA and immunoblot) and fluid phase assays as well as Western Blotting.

Coating Dilute with your coating buffer to an appropriate concentration e.g. 1 µg/ml. Please notice that coating conditions have to be evaluated carefully.

Storage	Store at -80°C. Stability is given for at least 5 years when stored at -80°C (see retest date on Certificate of Analysis), with potential to date extend after retesting. If storage at -80°C is not possible, storage at ≤ -20°C is recommended. Solutions are stable for at least 2 years when stored at ≤ -20°C. Upon reconstitution, store undiluted working aliquots preferably at -80°C (if not possible at ≤ -20°C, see comment above). Avoid repeated freezing and thawing. ***Delivery is possible at ambient temperature***
Related products	G051 26mer gliadin peptide (native 26mer gamma gliadin peptide) G052 33mer gliadin peptide (native 33mer alpha gliadin peptide) G007 DGPx1 (deamidated 26mer gamma gliadin peptide) G055 Carrier protein control G056 DGP and Gliadin peptides (set no 1: G051, G052, G007, G054, G055; 100 µg each)
Release date	07 December 2023
NOTE	INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.