

Product number **G005**
 Revision number **RN2.6**





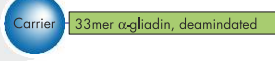
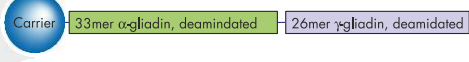

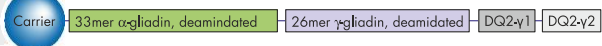
Product Name DGPx4 (Fusion protein of 4 deamidated gliadin peptides)

Background info Detection of gliadin antibodies has been used for a long time in celiac disease diagnostics, but suffered from a low specificity. This disadvantage was overcome by the introduction of deamidated gliadin peptides as antigen.

The ratio behind is that tissue transglutaminase catalyzes gliadin deamidation in the intestinal mucosa of celiac disease patients, resulting in deamidated gliadin peptides which are recognized by HLA receptors of immune cells. Therefore, deamidated gliadin antibodies are specific for celiac disease.

We introduced four different variations of deamidated gliadin antigens composed by a carrier protein linked with a combination of the deamidated 33-mer and 26-mer gamma gliadin peptides and the DQ2-GI- and DQ2-GII-peptides (Dørum S. et al., J Proteome Res. 2009; 8:1748-55). In addition, the non-deamidated native versions as well as the carrier protein control are available.

Art. No. Name

G051	26mer gliadin peptide		
G052	33mer gliadin peptide		
G055	Carrier protein control		
G007	DGPx1 (26mer DGP)		
G054	33mer DGP		
G006	DGPx2		
	G005	DGPx4	

Description DGPx4 is a fusion protein of 2 different deamidated gliadin peptides and 2 DQ2-epitopes, fused with a carrier protein to be used as antigen for the detection of antibodies specific for deamidated gliadin. (Dørum S. et al., J Proteome Res. 2009; 8:1748-55).

Source Recombinantly produced in *E. coli*

Quantity 500 µg / 5 mg

Molecular Weight 33 kDa

Purity > 95% (SDS-PAGE and Coomassie staining)

Appearance White lyophilized solid.

Reagents DGPx4 is lyophilized from a solution of ~50 mM NaH₂PO₄, pH 6.8.

Reconstitution Add at least the volume of H₂O the protein is lyophilized from (see Certificate of Analysis) to the vial of lyophilized powder. Rotate vial gently until solid dissolves. After reconstitution the solution should be stored frozen in working aliquots.

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Application	The recombinant antigen is meant for solid (ELISA and immuno blot) and fluid phase diagnostic assays. The protein is bound by human type IgA and IgG (auto) antibodies.
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	<p>Store at -80°C.</p> <p>If storage at -80°C is not possible, storage at ≤ -20°C is recommended. While no formal stability data are available at -20°C, according to our overall experience stability is still given.</p> <p>Upon reconstitution, store undiluted working aliquots preferably at -80°C (if not possible at ≤ -20°C, see comment above). Avoid repeated freezing and thawing.</p> <p><i>Delivery is possible at ambient temperature</i></p>
Related products	G006 DGPx2 (Fusion protein of 2 deamidated gliadin peptides) G007 DGPx1 (deamidated gliadin peptide)
Release date	23 June 2020
NOTE	INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.