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Datasheet for 003-0104

Chicken IgG F(ab')2

Overview

Description:	Chicken IgG F(ab')2 Fragment (BULK ORDER) - 003-0104
Item No.:	003-0104
Size:	10 mg
Applications:	SDS-PAGE, Cellular Assay, FC, Functional Assay
Origin:	Chicken

Product Details

Background:	Secreted as part of the adaptive immune response by plasma B cells, immunoglobulin G constitutes 75% of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the compliment cascade, and opsinization for phagocytosis. This product possesses the F(ab')2 fragment, recognized by the two F(ab) fragments yielded from the digestion of the antibody below the disulfide bond hinge region.
Synonyms:	Chicken IgG F(ab')2 fragment, Chicken IgG Fab2 fragment, Chicken IgY F(ab')2 fragment, Chicken IgY Fab2 fragment
Species of Origin:	Chicken
Format:	IgG F(ab')2
Type:	Native Protein

Target Details

Purity/Specificity:	This product was prepared from normal serum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by pepsin digestion and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Chicken IgG, anti-Chicken IgG F(ab')2 and anti-Chicken Serum. No reaction was observed against anti-Chicken IgG F(c) or anti-Pepsin.

Application Details

Tested Applications:	SDS-PAGE

Suggested Applications:	Cellular Assay, FC, Functional Assay (Based on references)
Application Note:	Chicken IgG F(ab')2 fragment has been tested by SDS-PAGE and can be utilized as a control or standard reagent in Western Blotting and ELISA experiments.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

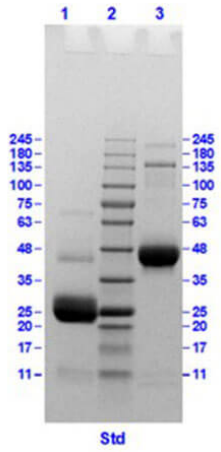
Formulation

Physical State:	Lyophilized
Concentration:	10.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

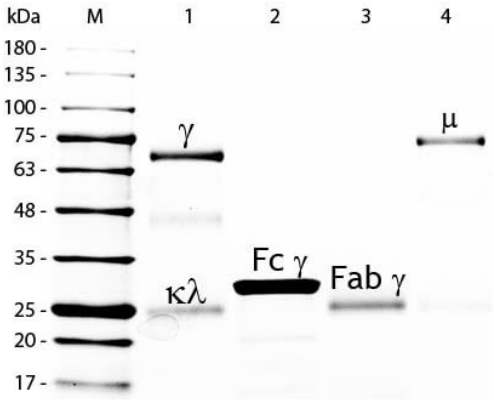
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



SDS-PAGE
SDS-PAGE Results of Chicken IgG F(ab)'2.
Lane 1: Chicken IgG F(ab)'2 fragment - Reduced [5µg].
Lane 2: Opal Prestained Molecular Weight Marker (p/n MB-210-0500).
Lane 3: Chicken IgG F(ab)'2 fragment - Non-Reduced [5µg].
4-20% Gel. Coomassie stained.



SDS-PAGE
SDS-PAGE of Chicken IgG/IgY Whole Molecule Rhodamine Conjugated (p/n 003-0002). Lane M: 5 µL Opal Prestained Marker (p/n MB-210-0500). Lane 1: Reduced Chicken IgG Whole Molecule Rhodamine Conjugated (p/n 003-0002). Lane 2: Reduced Chicken IgG F(c) Fragment (p/n 003-0103). Lane 3: Reduced Chicken IgG Fab Fragment (p/n 003-0105). Lane 4: Reduced Chicken IgM Whole Molecule (p/n 003-0107). Load: 1 µg per lane. Predicted/Observed size: IgG at 72 and 25 kDa; F(c) at 25 kDa; Fab at 25 kDa; IgM at 75 kDa. Observed F(c) Fragment migrates slightly higher. Other bands: Chicken IgG heavy chain alternative splicing variant at approximately 40 kDa in Lane 1.

References

- Taylor AI. et al. Avian IgY binds to a monocyte receptor with IgG-like kinetics despite an IgE-like structure. *J Biol Chem.* (2008)
- Moore RW et al. Effect of bursal anti-steroidogenic peptide and immunoglobulin G on neonatal chicken B-lymphocyte proliferation. *Comp Biochem Physiol C Toxicol Pharmacol.* (2003)

Disclaimer

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