Agilent
Dako

Anti-Human Kappa and Lambda Light Chain Reagents

Rabbit polyclonal $F(ab')_2$-fragmented antibodies produced by the latest industry standards

Agilent

Anti-human kappa and lambda light chains reagents produced by leading standards

For professional users looking for fluorescently conjugated antibodies against human kappa or lambda light chains, Agilent manufactures $F(ab')_2$ fragments of affinity-isolated polyclonal rabbit antibodies using leading standards in the industry.

Human kappa and lambda light chains

Light chains are integral components of human immunoglobulins and can be of a kappa or a lambda variant. Most B cells, with the exception of pre-B cells and their progenitors, express immunoglobulin on their surface while plasma cells, a terminally differentiated B cell, secrete immunoglobulin. Each cell expresses only one light chain variant. In normal peripheral blood and lymph nodes, there is a mixture of kappa-positive and lambda-positive cells, with approximately two-thirds of the cells expressing kappa and one-third expressing lambda.

Production of polyclonal antibodies

Agilent owns the entire production life cycle of rabbit polyclonal antibody reagents. We leverage more than five decades of expertise and continued improvements in our manufacturing processes. From rabbit immunization in our veterinary farms to downstream processing and commercialization, we live up to stringent quality control protocols and regulatory standards. Below is a schematization of how our polyclonal antibody reagents are produced.

Expected features of Agilent's rabbit polyclonal antibodies

Accomodative of epitopic variation

Mutational changes such as polymorphism, heterogeneity of glycosylation, or a slight denaturation in the structure of an antibody can result in the lack of an adequate binding site for monoclonal antibodies. Polyclonal antibodies are not as susceptible to mutational changes of the epitope due to recognition of multiple epitopes on the target molecule.

Multiple binding sites per antigen

Polyclonal antibodies bind to multiple sites of the antigen in comparison to monoclonal antibodies, which bind only to a single epitope. This can allow the placement of multiple antibodies on each target molecule.

$F(ab')_2$-fragmented antibodies

Agilent's kappa and lambda reagents are $F(ab')_2$ fragments and not whole Ig molecules. The use of $F(ab')_2$-fragmented antibodies mitigates potential non-specific binding mediated by Fc receptors.

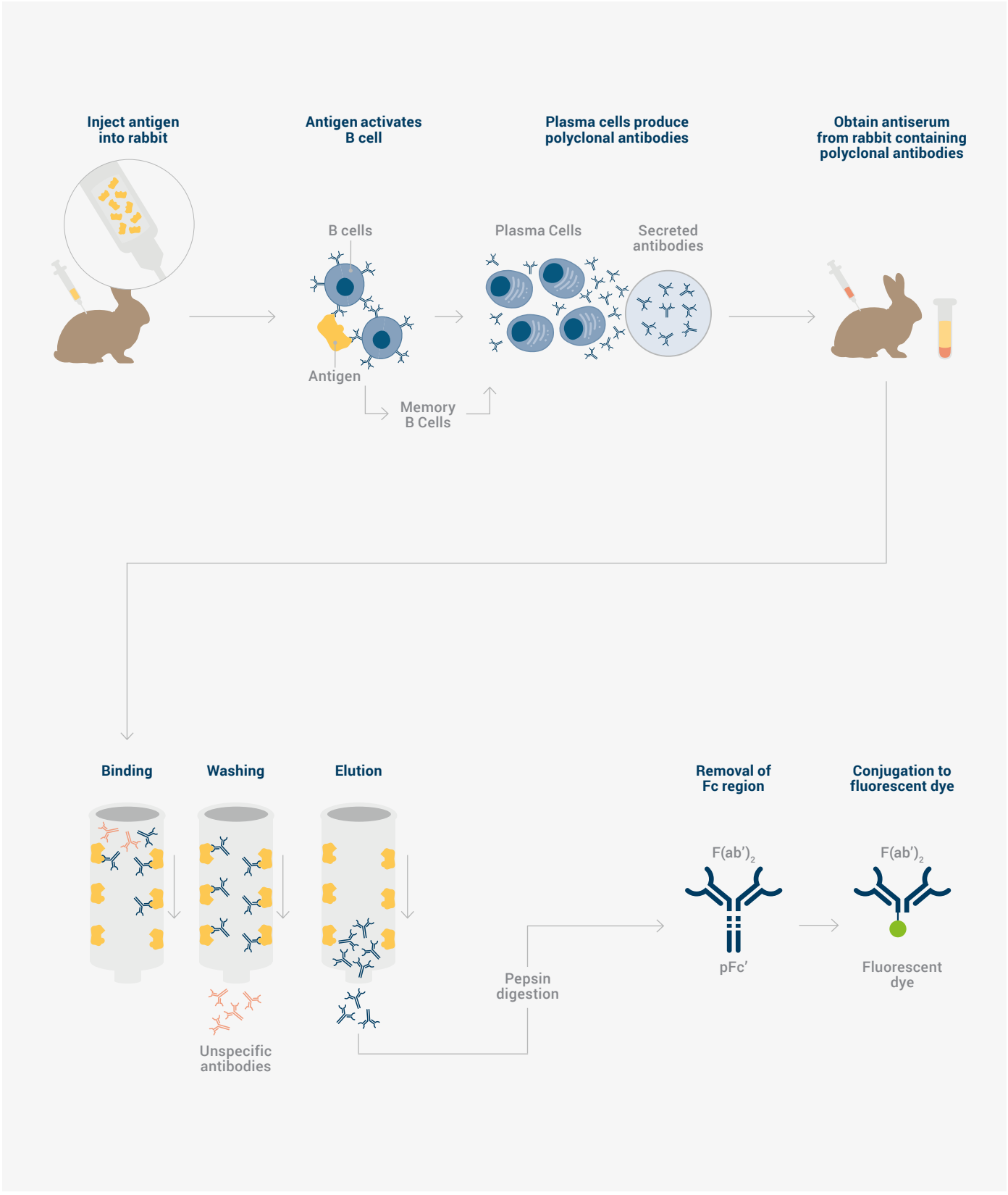
High grade of purification

Agilent's kappa and lambda antibodies undergo several purification steps. Before conjugation with the flurochrome, the antibody is solid-phase adsorbed with human plasma proteins to remove traces of contaminating antibodies. The adsorbed antibody is later purified using affinity chromatography on a column with immobilized human kappa/lambda light chains. The affinity-isolated antibody is then degraded with pepsin and the $F(ab')_2$ fragment isolated by gel filtration. This process results in a high grade of purified antibody.

High lot-to-lot consistency

The strain of rabbits used to produce Agilent's polyclonal antibodies ensures high-yielding and specific responses with optimal consistency during production. The impact on the entire serum pool is minimal with the loss of one rabbit, resulting in a high lot-to-lot consistency.

Rabbit immunization and downstream processing of antibody reagents



Agilent
Dako

Ordering information

	Product	Size	Code
	Single-Color Reagents		
ASR	Polyclonal Rabbit Anti-Human Kappa Light Chains/APC, Rabbit $F(ab')_2$	1 mL	C022201-1
ASR	Polyclonal Rabbit Anti-Human Kappa Light Chains/FITC, Rabbit $F(ab')_2$	1 mL	F043401-1
ASR	Polyclonal Rabbit Anti-Human Kappa Light Chains/RPE, Rabbit $F(ab')_2$	1 mL	R043601-1
ASR	Polyclonal Rabbit Anti-Human Lambda Light Chains/FITC, Rabbit $F(ab')_2$	1 mL	F043501-1
ASR	Polyclonal Rabbit Anti-Human Lambda Light Chains/RPE, Rabbit $F(ab')_2$	1 mL	R043701-1

ASR: Analyte specific reagent. Analytical and performance characteristics are not established.

For more information, please visit:
www.agilent.com

Please contact us for more details:
rpsupport@agilent.com

This information is subject to change without notice.

38707 D56118_02 2022SEP10

Agilent
Trusted Answers