

Complete Alpha Complementation Product Line

Molecular Depot exclusively offers a complete line of products for the development of alpha complementation-based assays. All products have been extensively validated and are available in large bulk amounts.

Product	Catalog Number	Description
Beta-galactosidase Enzyme Acceptor	P2010005	Beta-galactosidase Enzyme Acceptor (also known as Omega Domain) is the larger fragment of the Beta-galactosidase enzyme. This fragment can associate with the smaller fragment of the Beta-galactosidase enzyme (Alpha peptide, enzyme donor) and reconstitute an active Beta-galactosidase enzyme.
Beta-galactosidase Enzyme Donor	P2010004	Beta-galactosidase Enzyme Donor (also known as Alpha Peptide fragment) can complement the Beta-galactosidase Enzyme Acceptor (also known as Omega domain) to reconstitute an active Beta-galactosidase enzyme. This phenomenon, known as alpha complementation, can be exploited to develop assays by conjugating the Beta-galactosidase Alpha Peptide fragment to various analytes. The sequence of the enzyme donor has been specifically engineered to include a unique central cysteine that can be used for analyte conjugation.
Enzyme Acceptor Stabilization Buffer	B2010002	A specially designed buffer that stabilizes the beta-galactosidase fragment known as enzyme acceptor (Omega fragment). The buffer can extend the shelf life of the enzyme acceptor to up to 12 months at 2°-8°C. Without this buffer, the enzyme acceptor is highly instable and loses activity at high rate.
Enzyme Donor Stabilization Buffer	B2010001	A specially designed buffer that stabilizes the beta-galactosidase fragment known as enzyme donor (Alpha fragment). The buffer can extend the shelf life of the enzyme donor to up to 12 months at 2° – 8°C. Without this buffer, the enzyme donor is highly instable and loses activity at an extremely high rate.
CPRG (Chlorophenol red-β-D-galactopyranoside)	C2010005	Chlorophenol red-β-D-galactopyranoside (CPRG) is an excellent beta-galactosidase substrate that surpasses o-nitrophenyl-beta-D-galactopyranoside (ONPG). CPRG is very soluble in water and its chromogenic product (chlorophenol red) has an extinction coefficient that is 21-fold higher than that of ONPG (o-nitrophenol). As a result, CPRG can be used in highly sensitive beta-galactosidase-based assays and detection methods. Absorbance of chlorophenol red can be measured at 570-595 nm.
Alpha Complementation Kit Beta-galactosidase	K2010002	A Beta-galactosidase Alpha complementation kit consisting of enzyme donor, enzyme acceptor, their respective stabilization buffers, a Beta-galactosidase chromogenic substrate and detailed instructions. Kit can be used to develop alpha complementation-based assays (cloned enzyme donor immunoassays).



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How to Order

- Order online using our automated checkout system at <https://moleculardepot.com>
- Order by email at info@moleculardepot.com (electronic PO accepted)
- Order by phone at 1-858-900-3210
- Order by Fax at 1-858-437-9884

