

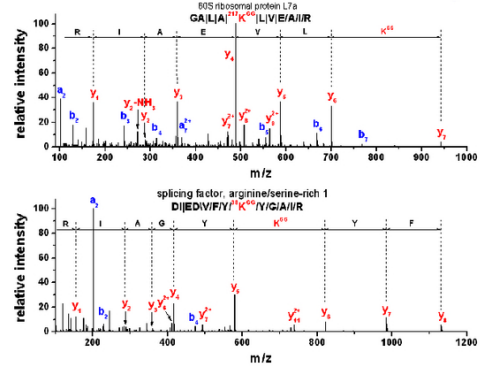
## Monoclonal Antibody to Diglycyl Lysine - Purified

<b>Alternate names:</b>	Diglycyl Lysine
<b>Catalog No.:</b>	AM50596PU-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	lot-specific
<b>Background:</b>	Anti-Diglycyl Lysine has been shown to specifically detect peptides derived from the ubiquitinated portion of proteins. Diglycyl Lysine, clone GX41 is thought to find diglycyl-lysine moieties that are created and left behind at places of ubiquitination after digestion with trypsin has occurred.
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
<b>Clone:</b>	GX41
<b>Immunogen:</b>	Linear peptide corresponding to Diglycyl Lysine.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Protein G Chromatography <b>Buffer System:</b> 0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl with 0.05% sodium azide.
<b>Applications:</b>	<b>Immunoprecipitation:</b> 10 µg of Anti-Diglycyl Lysine immunoprecipitated peptides containing Diglycyl Lysine modification from isolated ubiquitinated proteins which were obtained from a human cell line. <b>Western Blot:</b> 0.5 µg/mL of this antibody detected Diglycyl Lysine on 10 µg of BSA protein and Diglycine modified BSA. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	Antibody recognizes lysine residues modified by diglycine, a residue left at sites of ubiquitination after trypsin digestions. Demonstrated to react with Human, Mouse and Rat. Broad species cross-reactivity expected based on 100% sequence homology.
<b>Storage:</b>	Store undiluted at 2-8°C. Shelf life: one year from despatch.

**Pictures:**

**Mass Spectrometry Analysis:**  
 Annotated MS/MS spectra of a ubiquitin remnant-containing peptide identified by LC-ESI-MS/MS in a Q-TOF mass spectrometry. First, the ubiquitinated proteins were purified from a HEK293 cell lysate and digested by trypsin. Then, ubiquitin remnant-containing peptides were immunoprecipitated by the anti-diglycyl-lysine antibody (GX41) and analyzed by MS. The sequence of the ubiquitinated peptide is indicated and the fragment ions are labeled in the MS/MS spectrum. The diglycine-modified lysine and its position in the peptide sequence are indicated in red. The symbols, \, / and

**MS/MS Identification of Ub Sites from Cell Lysate**



**Western Blotting Analysis:**  
 Representative lot data. BSA protein and Glycine Glycine modified BSA were probed with Anti-Diglycyl Lysine, clone GX41 (0.5 µg/mL). Proteins were visualized using a Goat Anti-Mouse IgG secondary antibody conjugated to HRP and a chemiluminescence detection system.

