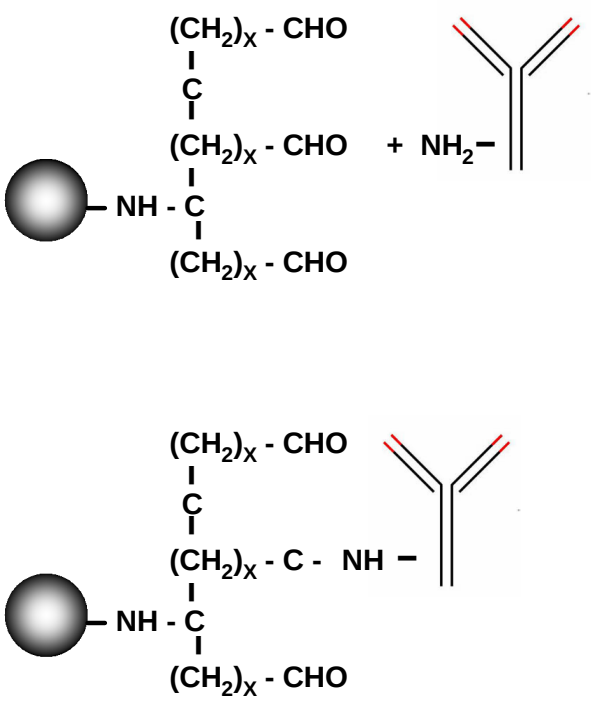
Covalent Coupling Procedure on SiMAG-PGL

Introduction:

This procedure describes the easy and fast covalent coupling of low and high molecular amine-group containing ligands to the terminal auto reactively polyglutaraldehyde-groups of **SiMAG-PGL**.



Covalent binding on auto reactive polyglutaraldehyde-groups

Equipment and reagents:

- **SiMAG-PGL**
- **Wash & Coupling Buffer:** PBS, pH 7.4 - 8.0
- **Blocking Buffer:** PBS, 2 % BSA, 0.05 % sodium azide
- **Storage Buffer:** PBS, 0.1 % BSA, 0.05 % sodium azide
- **Magnetic Separator** (**e.g. MagnetoPURE,** Product Number: MP-10)

Technical Note:

- All buffers used for activation or coupling may not contain amino-groups or proteins.
- For antibodies or proteins, we recommend to use a minimum amount of 50 µg antibody/protein per 10 mg **SiMAG-PGL**. In general, the higher the amount of antibody/protein per milligram of **SiMAG-PGL**, the higher will be the degree of magnetic particle surface coating with the protein.

Protocol:

The following protocol describes the coupling of amine-containing ligands on *10 mg* particles. This procedure can be scaled up by adjusting volumes of required reagents.

1. Wash the **SiMAG-PGL** particles with 1 ml PBS buffer using a magnetic separator and resuspend the particles in 0.25 ml PBS buffer by vortexing.
2. Add the amine group containing ligands (e.g. 50 µg protein dissolved in ddH_2O) to the particles and mix the suspension on a shaker for 2 hours at room temperature.
3. Add 0.5 ml Blocking buffer to the particles and mix the suspension on a shaker for 30 minutes at room temperature.
4. Wash the particles 2 x with 1 ml PBS and resuspend the particles in Blocking / Storage buffer.